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THE COMPOSITION OF SOME COMMERCIAL INSECTICIDES, FUNGICIDES, BACTERICIDES, RODENTICIDES AND WEED KILLERS

A COMPILATION,
SUPPLEMENT TO BULLETIN 300

H. J. FISHER AND E. M. BAILEY

Connecticut
Agricultural Experiment Station
New Haven

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THE COMPOSITION OF SOME COMMERCIAL INSECTICIDES, FUNGICIDES, BACTERICIDES, RODENTICIDES AND WEED KILLERS

A COMPILATION,

SUPPLEMENT TO BULLETIN 300

H. J. Fisher and E. M. Bailey

This Station published in 1929, as Bulletin 300, a compilation of the analyses of commercial insecticides, fungicides, and similar materials, reported in various publications up to that year. Since that time the Station has accumulated a considerable number of other analyses of insecticides. These analyses have been assembled in the present bulletin in order to supplement Bulletin 300.

Many of the analyses were made in the Analytical Laboratory of this Station. For the others we are indebted to the following publications of other States:

California Department of Agriculture, Special Publication 101, 1930.

Maine Agricultural Experiment Station, Official Inspections 134, 1929, and 138, 1930.

A

Ace Orchard and Plant Spray

(Chemical Products Co.)

	Guaranteed	Found
Soap	....	20.57
Ammonium thiosulfate	....	3.10
Ammonium sulfate	....	1.65
Ammonium polysulfide and free ammonia	....	16.86
Free sulfur	....	2.22
Water	60.00	51.50

Calif. Dept. Agr., Spec. Pub. 101: 39. 1930.

Acid, Carbolic

See Kreo-Phene Crude Carbolic Acid.

Acme All Round Spray

(Acme White Lead & Color Works, Boston, Mass.)

Guaranteed: Lead arsenate 14.5 per cent; Bordeaux mixture 85.5 per cent; total active ingredients 25.5 per cent (liquid content active ingredients, nicotine sulfate 40 per cent).

Found: Lead arsenate 16.02 per cent; water-soluble arsenic (As) 0.14 per cent; nicotine sulfate (liquid) 49.59 per cent; copper oxide 11.14 per cent.—*Maine Agr. Expt. Sta. Official Inspections* 134: 114. 1929.

Acme Bait-M

(Acme White Lead & Color Works, San Francisco, Calif.)

	Guaranteed	Found
Arsenic (As)	1.50	1.88

Calif. Dept. Agr., Spec. Pub. 101: 21. 1930.

Acme Chlorinated Lime

(B. T. Babbitt, Montebello, Calif.)

	Guaranteed	Found
Available chlorine	24.00	15.32

Calif. Dept. Agr., Spec. Pub. 101: 80. 1930.

Acme Fish Oil Spray Soap

Acme Spray Soap

See Soap.

Acto

See Oils, Mineral.

Adams Handy Killo

(R. B. Adams, Monticello, Maine.)

Guaranteed: Arsenite of soda containing not less than 20 per cent arsenic. Found: Arsenic 21.6 per cent.—*Maine Agr. Expt. Sta., Official Inspections* 138: 106. 1930.

Adheso 9-O Blue Dust

See Bordeaux Mixture.

Adheso 9-5 Green Dust

(Ansbacher Insecticide Co., New York, N. Y.)

	Guaranteed	Found
Total arsenic	3.63	5.28
Total copper	6.50	6.81

Maine Agr. Expt. Sta., Official Inspections 134: 113. 1929.

Aluminum Sulfate

(Apothecaries Hall Co., Waterbury, Conn.)

Found: Sample was nearly all water-soluble and contained only a trace of iron.—*Conn. Agr. Expt. Sta., Sample* 939.

Anaheim Spray Emulsion

See Oil Emulsions, Mineral.

An-Fo Ant Powder

(An-Fo Manufacturing Co.)

	Guaranteed	Found
Sodium fluoride	78.00	81.72
Pyrethrum	8.00	....
Organic matter	....	10.10

Calif. Dept. Agr., Spec. Pub. 101: 78. 1930.

An-Fo Snail Foil

(An-Fo Manufacturing Co.)

	Guaranteed	Found
Arsenic	1.50	2.35

Calif. Dept. Agr., Spec. Pub. 101: 21. 1930.

Angelus Moth Bane

(Brunswig Drug Co., Los Angeles, Calif.)

Not analyzed.—*Calif. Dept. Agr., Spec. Pub.* 101: 84. 1930.

Ansect

See Key Brand Ansect.

Anti-Ant, an Ant Exterminator

(The Holmerden Co., Stratford, Conn.)

Guaranteed: Active ingredients 37.5 per cent; cornstarch 12.5 per cent; inert (sugar as bait) 49 per cent; coloring matter 1 per cent.

Found: Sugar and starch present; borax 44.69 per cent.—*Maine Agr. Expt. Sta., Official Inspections* 134: 114. 1929.

Anti-Ant, Argentine Ant Poison

(Brunswig Drug Co., Los Angeles, Calif.)

	Guaranteed	Found
Arsenic	0.11	0.23

Calif. Dept. Agr., Spec. Pub. 101: 20. 1930.

Anti-Snail

(Brunswig Drug Co., Los Angeles, Calif.)

	Guaranteed	Found
Arsenic	1.34	1.05

Calif. Dept. Agr., Spec. Pub. 101: 21. 1930.

Ant Powder

See Sodium Fluoride.

Apex Moth Crystals

See Paradichlorbenzene.

Aphistrogen

(Germain Seed & Plant Co., Los Angeles, Calif.)

	Guaranteed	Found
Soap	....	14.16
Water	79.50	80.00

Calif. Dept. Agr., Spec. Pub. 101: 68. 1930.

Arcoite

(Arcoite Chemical Corp., Berkeley, Calif.)

	Guaranteed	Found
Available chlorine	4.50	4.09

Calif. Dept. Agr., Spec. Pub. 101: 80. 1930.

Arsenate of Calcium

See Table 1.

Arsenate of Lead

See Niagara Arsenate of Lead.

Arsenate of Lead and Sulphur (Home Mixture)

(Niagara Sprayer Co., Middleport, N. Y.)

Found: Water-soluble arsenic pentoxide 0.55 per cent; sample was neutral to litmus.—*Conn. Agr. Expt. Sta., Sample* 1453.

Arsenate of Sodium

See Holmerden Weed Destroyer.

Arsenic Trioxide
Arsenic, White
Arsenious Oxide

See Ortho White Arsenic; Rough-on-Rats Poison.

TABLE 1. ARSENATE OF CALCIUM

Manufacturer or distributor and brand	Arsenic oxide, As_2O_5				Calcium arsenate, $Ca_3(AsO_4)_2$	Publication
	Total		Water-soluble			
	Guaranteed	Found	Guaranteed	Found		
	%	%	%	%	%	
Acme White Lead and Color Works. Acme	40.00	41.94	0.77	0.09	72.50	Calif. Dept. Agr., Spec. Pub. 101:17. 1930.
California Spray Chemical Co. Calcium Arsenate Dust No. 26	13.33	15.65	....	....	27.10	Calif. Dept. Agr., Spec. Pub. 101:17. 1930.
California Sprayer Co. Calispray Dust No. 42	12.89	13.61	1.15	0.21	23.60	Calif. Dept. Agr., Spec. Pub. 101:17. 1930.
Lucas Kil-Tone Co., Vineland, N. J. Special	39.88	42.69	....	0.44	73.94	Maine Agr. Expt. Sta., Official Inspections 134:111. 1929.

Arsenite of Sodium

See B-E Standard Sodium Arsenite Solution; McEverlast Sodium Arsenite; Mission Sodium Arsenite Solution.

Avon Poultry Spray

(Associated Oil Co., Monterey, Calif.)

Guaranteed: Mineral oils 98.00 per cent.
Found: Phenols 3.66 per cent; tar oils 14.16 per cent; mineral oils 82.00 per cent.—*Calif. Dept. Agr., Spec. Pub.* 101: 70. 1930.

Avon Spray Emulsion
Avon Spray Emulsion B

See Oil Emulsions, Mineral.

B

B. T. Babbitt's Concentrated Lye

(B. T. Babbitt, Inc., Los Angeles, Calif.)

	Guaranteed	Found
Sodium hydroxide	94.00	94.80
Sodium carbonate	2.00	3.18

Calif. Dept. Agr., Spec. Pub. 101: 83. 1930.

Barium Carbonate

See McClellen's Rat Ruin.

Barley, Poisoned

See Strychnine Preparations.

Barnard & Co.'s Reliable Water Bug and Roach Paste

(Eastern Drug Co., Boston, Mass.)

	Guaranteed	Found
Free phosphorus	2.00	2.02

Maine Agr. Expt. Sta., Official Inspections 134: 114. 1929.

Barnes Emulsion

(Barnes Emulsion Co., Gardena, Calif.)

	Guaranteed	Found
Water	90.00	89.50

Calif. Dept. Agr., Spec. Pub. 101: 84. 1930.

Barrett's Roachsault

See Sodium Fluoride.

B-E Standard Sodium Arsenite Solution

(Bright Ellsworth Co., Los Angeles, Calif.)

	Guaranteed	Found
Arsenic trioxide	29.00	22.92

Calif. Dept. Agr., Spec. Pub. 101: 18. 1930.

Beetle Mort Bordo Arsenate Dust

(Lucas Kil-Tone Co., Vineland, N. J.)

	Guaranteed	Found
Total arsenic	6.00	7.88
Total copper	4.20	6.50

Maine Agr. Expt. Sta., Official Inspections 134: 113. 1929.

TABLE 2. BORDEAUX MIXTURE

Manufacturer or distributor and brand	Copper		Publication
	Guaranteed	Found	
	%	%	
Ansbacher Insecticide Co., New York, N. Y. Adheso 9-0 Blue Dust	8.59	10.58	Maine Agr. Expt. Sta., Official Inspections 134:112. 1929.
Ansbacher Insecticide Co., New York, N. Y. Oxo	12.50	12.82	Maine Agr. Expt. Sta., Official Inspections 134:112. 1929.
California Spray Chemical Co. Ortho Powdered	12.75	13.09	Calif. Dept. Agr., Spec. Pub. 101:40. 1930.
Lucas Kil-Tone Co., Vineland, N. J. Cloros Dry Bordo	9.00	10.10	Maine Agr. Expt. Sta., Official Inspections 134:112. 1929.
Lucos Kil-Tone Co., Vineland, N. J. Cloros Dry Bordo	22.00	22.76	Maine Agr. Expt. Sta., Official Inspections 138:105. 1930.
Lucas Kil-Tone Co., Vineland, N. J. Copper Lime Dust	8.75	7.72	Maine Agr. Expt. Sta., Official Inspections 134:112. 1929.
Lucas Kil-Tone Co., Vineland, N. J. Green Cross Cloros Dry Bordo	9.00	9.68	Maine Agr. Expt. Sta., Official Inspections 138:105. 1930.
Lucas Kil-Tone Co., Vineland, N. J. Green Cross Dry Bordo Cloros	9.00	9.20	Maine Agr. Expt. Sta., Official Inspections 138:105. 1930.
Medina Chemical Co., Medina, N.Y. Medina Brand Process Blue Dust 9%	9.00	9.24	Maine Agr. Expt. Sta., Official Inspections 138:105. 1930.
New York Insecticide Co., Inc., Medina, N. Y. Medina Brand Process Blue Dust	6.72	7.40	Maine Agr. Expt. Sta., Official Inspections 134:112. 1929.
Niagara Sprayer Co., Middleport, N. Y. Niagara Spud Brand Dust	8.59	8.88	Maine Agr. Expt. Sta., Official Inspections 138:105. 1930.
The Sherwin-Williams Co., Bound Brook, N. J. 25-75 Sherwin-Williams Copper Lime Dust	9.00	9.36	Maine Agr. Expt. Sta., Official Inspections 138:105. 1930.
Summers Fertilizer Co., Baltimore, Md. Summers' Bordeaux Powder	11.00	10.80	Maine Agr. Expt. Sta., Official Inspections 138:105. 1930.
Western Wholesale Drug Co. Devoe Standard	13.00	14.49	Calif. Dept. Agr., Spec. Pub. 101:41. 1930.
Western Wholesale Drug Co. Nico Dust No. 102	7.00	7.05	Calif. Dept. Agr., Spec. Pub., 101:41. 1930.

Black Fly Lotion

(Cook, Everett & Pennell, Portland, Maine)

Found: Sample has an oil base and contains oil of citronella.—*Maine Agr. Expt. Sta., Official Inspections* 134: 114. 1929.

Blecho

(J. B. Keightly, Los Angeles, Calif.)

Found: Available chlorine 5.31 per cent.—*Calif. Dept. Agr., Spec. Pub.* 101: 80. 1930.

Blue Ribbon Orchard Spray No. 2
Blue Ribbon Orchard Spray No. 4
Blue Ribbon Special Orchard Spray

See Oil Emulsions, Mineral.

Bordeaux Mixture

See Table 2.

Bordeaux Mixture—Lead Arsenate

See Beetle Mort Bordo Arsenate Dust; Calispray Tomato Dust No. 86.

Bud's Bleaching Water

(The Bud Manufacturing Co., Santa Rosa, Calif.)

	Guaranteed	Found
Available chlorine	5.00	5.24

Bug-Ant Doom
Buhach Insect Powder

See Pyrethrum.

C

Cala Argentine Ant Powder

(McKesson, Langley & Michaels Co., Fresno, Calif.)

	Guaranteed	Found
Sodium fluoride	76.00	84.69
Pyrethrum	7.00	....
Organic matter	....	12.56

Calif. Dept. Agr., Spec. Pub. 101: 78. 1930.

Calcium Arsenate
Calispray Dust No. 42

See Arsenate of Calcium.

Calcium Cyanide

See Table 3.

Calcium Hydroxide

See Lime, Hydrated.

Calispray No. 3—10% Dust

(The California Sprayer Co.)

	Guaranteed	Found
Nicotine	3.70	2.03
Sulfur	60.00	64.07

Calif. Dept. Agr., Spec. Pub. 101: 37. 1930.

Calispray No. 15—7½% Dust
Calispray No. 16—10% Dust

See Nicotine Dusts.

TABLE 3. CALCIUM CYANIDE

Manufacturer or distributor and brand	Calcium cyanide $Ca(CN)_2$		Publication
	Guaranteed	Found	
	%	%	
American Cyanamid Co., New York, N. Y. Cyanogas-A	40.00	45.89	Maine Agr. Expt. Sta., Official Inspections 138:106. 1930.
American Cyanamid Sales Co., Bakersfield, Calif. Cyanogas A-Dust	40.00	44.83	Calif. Dept. Agr., Spec. Pub. 101:82. 1930.
American Cyanamid Sales Co., Bakersfield, Calif. Cyanogas Calcium Cyanide (Crude) A-Dust	....	44.19	Calif. Dept. Agr., Spec. Pub. 101:82. 1930.
American Cyanamid Sales Co., Bakersfield, Calif. Cyanogas Granular	....	48.62	Calif. Dept. Agr., Spec. Pub. 101:82. 1930.

Calispray No. 65

(The California Sprayer Co., Los Angeles, Calif.)

	Guaranteed	Found
Copper	7.00	7.69

Calif. Dept. Agr., Spec. Pub. 101: 40. 1930.

Calispray No. 81 L—6 Dust

(California Sprayer Co., Los Angeles, Calif.)

	Guaranteed	Found
Nicotine	2.00	2.45
Total arsenic	3.80	4.50
Water-soluble arsenic	0.50	0.30

Calif. Dept. Agr., Spec. Pub. 101: 33. 1930.

Calispray No. 82

(California Sprayer Co., Santa Paula, Calif.)

	Guaranteed	Found
Nicotine	2.70	2.93
Copper	7.00	7.03
Total arsenic	3.80	3.76
Water-soluble arsenic	0.50	0.12

Calif. Dept. Agr., Spec. Pub. 101: 33. 1930.

Calispray Tomato Dust No. 86

(California Sprayer Company)

	Guaranteed	Found
Total arsenic	8.80	9.89
Water-soluble arsenic	0.75	0.15
Lead oxide	....	44.90
Copper	3.80	4.90

Calif. Dept. Agr., Spec. Pub. 101: 16. 1930.

Carbola

(Carbola Chemical Co., Los Angeles, Calif.)

Found: Phenols 1.60 per cent.—*Calif. Dept. Agr., Spec. Pub.* 101: 70. 1930.

Carbolic Acid

See Kreo-Phene Crude Carbolic Acid.

Cartholineum

See McClellan's Cartholineum.

Cearmist

(The Cearmist Co., Providence, R. I.)

Guaranteed: Contains coal oil, oil mirbane, phenol acid, volatile and essential oils.

Found: Kerosene and phenol present.—*Maine Agr. Expt. Sta., Official Inspections* 134: 114. 1929.

Ceresan Dust

(Bayer Semesan Co.)

Guaranteed: Ethyl mercury chloride 1.60 per cent.

Found: Mercury 2.08 per cent.—*Calif. Dept. Agr., Spec. Pub.* 101: 82. 1930.

Chloride of Lime

Chlorinated Lime

See Acme Chlorinated Lime; Sinclair Chieftain Brand Chlorinated Lime.

Chlor-o-Sol

(Chicken Pharmacy, Petaluma, Calif.)

Found: Available chlorine 3.92 per cent.—*Calif. Dept. Agr., Spec. Pub.* 101: 80. 1930.

Climax Lawn Sand

(Stumpff & Walter Co., New York, N. Y.)

Found: Silica 73.24 per cent; ferrous oxide 4.05 per cent; calcium oxide 1.18 per cent; magnesium oxide 0.18 per cent; sulfur trioxide 10.77 per cent; ammonia 3.21 per cent; pH=5.16.

Estimated Composition:

Ferrous sulphate ($FeSO_4 \cdot 7\ H_2O$)	11.22
Ammonium sulphate [$(NH_4)_2SO_4$]	12.45
Ferrous oxide (FeO)	1.16
Calcium carbonate ($CaCO_3$)	2.11
Magnesium carbonate ($Mg\ CO_3$)	0.38
Silica (SiO_2)	73.24

Conn. Agr. Expt. Sta., Sample 3290.

Clipper Brand Oil Emulsion

See Oil Emulsions, Mineral.

Clipper Brand Original Fish Oil Soap Flakes

See Soaps.

Composal

See Phenol Soap Solutions.

Conkey's Mite Liquid

(G. E. Conkey Co., Long Beach, Calif.)

Guaranteed: Water 2.00 per cent.

Found: Phenols 1.46 per cent; tar oils 65.66 per cent; mineral oils 32.00 per cent; water 0.05 per cent.—*Calif. Dept. Agr., Spec. Pub.* 101: 70. 1930.

Co-Op Brand Spray Emulsion Medium

See Oil Emulsions, Mineral.

Copper Carbonate

(K. Inukai Co., San Francisco, Calif.)

	Guaranteed	Found
Copper	52.00	52.60

Calif. Dept. Agr., Spec. Pub. 101: 40. 1930.

Copper Lime Calcium Arsenate Dust

(Lucas Kil-Tone Co., Vineland, N. J.)

	Guaranteed	Found
Total arsenic	7.82	8.61
Total copper	9.00	10.04

Maine Agr. Expt. Sta., Official Inspections 138: 104. 1930.

Copper Lime Dust

See Bordeaux Mixture.

Copper Resinate

(This was an experimental preparation made by Mr. Walden of the Analytical Laboratory of the Connecticut Agricultural Experiment Station).

Found: Copper 37.44 per cent.—*Conn. Agr. Expt. Sta., Sample* 9708.

Copper Sulfate

See Table 4.

TABLE 4. COPPER SULFATE

Manufacturer or distributor and brand	Copper		Copper Sulfate		Publication
	Guaranteed	Found	Guaranteed	Found	
	%	%	%	%	
California Spray Chemical Co. Ortho Instant Blue Stone	23.00	23.90	....	....	Calif. Dept. Agr., Spec. Pub. 101:40. 1930.
Mammoth Chemical Co., New York, N. Y. Crystals	....	....	99.00	98.72	Maine Agr. Expt. Sta., Official Inspections 138:106. 1930.
Phillips Bros., New York, N. Y. Large Crystal	....	....	99.00	98.98	Maine Agr. Expt. Sta., Official Inspections 134:114. 1929.
L. Wetstone & Sons, Inc., Hartford, Conn	....	24.82	....	97.46	Conn. Agr. Expt. Sta., Sample 6982.

Cotton, Impregnated

(Manufacturer unknown)

Sample was a piece of cotton saturated with a white crystalline material, having a faint fatty odor, apparently mostly organic, and containing no arsenic or heavy metals. This cotton was to be placed in a cut in the bark of a spruce tree to kill corn-borers by its radioactivity. Test with an electroscope showed no radioactivity.—*Conn. Agr. Expt. Sta., Sample* 7359.

Creocide

(Braun-Knecht-Heimann Co.)

Found: Phenols 11.66 per cent; soap 8.60 per cent; non-mineral oils 24.24 per cent; mineral oils 48.94 per cent; water 5.12 per cent.—*Calif. Dept. Agr., Spec. Pub.* 101: 72. 1930.

Creol Dip

See Phenol Soap Solutions.

Creolineum Wood Preserver and Triple X Creolineum

(Western Wood Preserving Co., Los Angeles, Calif.)

	Guaranteed	Found	Guaranteed	Found
Coal-Tar distillate	70.00	78.90	60.00	66.20
Phenols	....	0.84	....	1.20
Water	....	trace	....	trace

Calif. Dept. Agr., Spec. Pub. 101: 86. 1930.

Creosanthol

Cresolis

Cresol Soap Solution

Crespolin

Cresy-Lol-Dip

Cub Sheep Dip

See Phenol Soap Solutions.

Cyanogas—A

Cyanogas A—Dust

Cyanogas Calcium Cyanide (Crude) A—Dust

Cyanogas Granular

See Calcium Cyanide.

D

Dead Stuck for Moths

(The Pennsylvania Chemical Manufacturing Co., Philadelphia, Pa.)

Guaranteed: 100 per cent active.

Found: The preparation is a petroleum product.—*Maine Agr. Expt. Sta., Official Inspections* 134: 119. 1929.

Dee-Kay Dandelion Killer

(The Weed Control Co., San Francisco, Calif.)

	Guaranteed	Found
Arsenic chloride	1.00	1.45

Calif. Dept. Agr., Spec. Pub. 101: 18. 1930.

Del Monte Heavy

Del Monte Light Medium

Del Monte Medium

Dendrol

Dendrol Dormant Spray Oil

See Oil Emulsions, Mineral.

Destruxol Emulsion

(Destruxol Corporation)

	Guaran-teed	Found	Guaran-teed	Found	Guaran-teed	Found	Guaran-teed	Found
Oils by volume	76.30	79.37	76.30	77.72	75.00	75.73	20.00	23.85
Phenols	3.00	3.37	6.00	2.86	7.50	10.00	2.00	2.40
Nicotine	1.00	1.60	1.00	1.55	0.80	1.39	12.00	17.96
Sodium cyanide	1.00	1.29	1.20	0.80	1.20	0.32	8.00	15.28
Water	....	7.69	....	8.40	....	4.30	....	28.83

Calif. Dept. Agr., Spec. Pub. 101: 39. 1930.

Devil's Dust

(Western Wholesale Drug Co., Los Angeles, Calif.)

	Guaranteed	Found
Nicotine	0.07	0.26
Sulfur	25.00	27.00
Naphthalene	....	11.48
Hydrocarbons	10.00	....

Calif. Dept. Agr., Spec. Pub. 101: 35. 1930.

Diluted Cresylic Acid Poultry House Spray

(G. P. McNear Co., Petaluma, Calif.)

	Guaranteed	Found
Phenols	31.66	31.75
Mineral oils	66.66	67.25
Water	....	0.90

Calif. Dept. Agr., Spec. Pub. 101: 71. 1930.

Dip Room Salts

(Scoville Manufacturing Co., Waterbury, Conn.)

	Guaranteed	Found
Copper	18.56	20.04
Zinc	2.28	0.90
Sulfur trioxide	....	31.27
Free acid	23.35	6.05
Calculated Composition:		
Copper sulphate ($CuSO_4$. 5 H_2O)	....	78.69
Zinc sulphate ($ZnSO_4$. 7 H_2O)	....	3.94
Sulphuric acid (H_2SO_4)	....	6.05

Conn. Agr. Expt. Sta., Sample 7373.

Diversol

(Diversey Manufacturing Co., Chicago, Ill.)

Guaranteed: Sodium hypochlorite over 2.5 per cent; trisodium phosphate over 90.00 per cent; inert (sodium chloride, etc.) under 5.0 per cent.

Found: Available chlorine 2.71 per cent; sodium hypochlorite 2.85 per cent.—*Conn. Agr. Expt. Sta., Samples* 40936 and 3726.

Dr. Hess Disinfectant

See Phenol Soap Solutions.

Dormol

See Oil Emulsions, Mineral.

Dustall No. 4

See Nicotine Dusts.

Dustall No. 41

(Insecticide Supply Co., Vista, Calif.)

	Guaranteed	Found
Copper	7.00	7.37

Calif. Dept. Agr., Spec. Pub. 101: 40. 1930.

Dustall No. 72

(Insecticide Supply Co.)

	Guaranteed	Found
Total arsenic	6.00	6.90
Copper	7.00	7.40

Calif. Dept. Agr., Spec. Pub. 101: 16. 1930.

Dustall No. 73

(Insecticide Supply Co.)

	Guaranteed	Found
Total arsenic	....	9.25
Water-soluble arsenic	....	0.38
Copper	....	6.73

Calif. Dept. Agr., Spec. Pub. 101: 16. 1930.

E

Economy Fly Spray

(Southern California Disinfecting Co., Los Angeles, Calif.)

Found: Phenols 4.40 per cent.—*Calif. Dept. Agr., Spec. Pub.* 101: 71. 1930.

885 Oil

See Oils, Mineral.

El Rey Gopher Poison

See Strychnine Preparations.

End-O-Pest

(Agricultural Chemical Works)

	Guaranteed	Found
Arsenic	1.32	2.46

Calif. Dept. Agr., Spec. Pub. 101: 21. 1930.

Enoz Moth Liquid

(Enoz Chemical Co., Chicago, Ill.)

Found: The preparation is a petroleum product.—*Maine Agr. Expt. Sta., Official Inspections* 134: 114. 1929.

Enoz Moth Spray

(Enoz Chemical Co.)

No analysis.—*Calif. Dept. Agr., Spec. Pub.* 101: 84. 1930.

E. S. C. Condensed Rosin Potash Spray Paste Form

E. S. C. Fish Oil Soap

E. S. C. Whale Oil Soap

See Soaps.

Ever Green

(McLaughlin-Gormley-King Co., Minneapolis, Minn.)

Guaranteed: Pyrethrum oleo-resin 11.5 per cent; acetone 7.5 per cent; alcohol 72 per cent.

Found: Acetone and alcohol present.—*Maine Agr. Expt. Sta., Official Inspections* 134: 114. 1929.

Exelo

(San José Spray Manufacturing Co., San José, Calif.)

Guaranteed: Water 17.00 per cent.

Found: Phenols 8.50 per cent; soap 10.60 per cent; mineral oil 45.98 per cent; non-mineral oil 25.49 per cent; water 8.00 per cent.—*Calif. Dept. Agr., Spec. Pub.* 101: 75. 1930.

F

F-A-G Moth Insurance

See Paradichlorbenzene.

Fertilor

(California Copper Producers' Trust)

	Guaranteed	Found
Ferrous sulfate ($FeSO_4$)	25.00	33.08
Ferric sulfate ($Fe_2(SO_4)_3$)	20.00	29.98
Copper sulfate ($CuSO_4$)	5.00	4.99

Calif. Dept. Agr., Spec. Pub. 101: 85. 1930.

56 White Oil

See Oils, Mineral.

Fishermen's Friend

(Cook, Everett & Pennell, Portland, Maine)

Found: The preparation is an oil containing citronella.—*Maine Agr. Expt. Sta., Official Inspections* 134: 114. 1929.

Fishermen's Protector

(Cook, Everett & Pennell, Portland, Maine)

Found: The preparation is a paste containing oil tar.—*Maine Agr. Expt. Sta., Official Inspections* 134: 114. 1929.

Fish Oil Soap

See Soaps.

5 White Oil

See Oils, Mineral.

Flue Dust

(Scoville Manufacturing Co., Waterbury, Conn.)

Guaranteed: Copper 3.24 per cent; zinc 31.36 per cent.

Found:	Water-Soluble	Water-Insoluble
Total	23.97	76.03
Acid-insoluble	....	31.55
Lead oxide	....	1.54
Copper oxide	....	3.23
Iron and aluminum oxides	....	3.82
Zinc oxides	6.07	31.72
Mangano-manganic oxide	....	0.14
Sulfur trioxide	10.02	1.23
Water	1.57	....

Sodium and potassium present; traces of cadmium, calcium, magnesium and chloride.—*Conn. Agr. Expt. Sta., Sample* 4714.

Fluosilicate of Sodium

See "Flu-Si" Dust.

"Flu-Si" Dust

(Michel & Pelton Co.)

	Guaranteed	Found
Sodium fluosilicate	70.00	70.13

Calif. Dept. Agr., Spec. Pub. 101: 85. 1930.

Foliage

(An-Fo Manufacturing Co., Oakland, Calif.)

Found: Water 1.50 per cent.—*Calif. Dept. Agr., Spec. Pub.* 101: 84. 1930.

Formaldehyde

(Small's Seed Co., Riverside, Calif.)

	Guaranteed	Found
Formaldehyde	37.00	37.05

Calif. Dept. Agr., Spec. Pub. 101: 85. 1930.

Formaldehyde (Formalin)

See also Form-O-Zone.

Form-O-Zone

(Southern California Disinfecting Co., Los Angeles, Calif.)

Found: Formaldehyde 3.38 per cent.—*Calif. Dept. Agr., Spec. Pub.* 101: 86. 1930.

Fort Industry Brand Lye

(Sinclair Manufacturing Co., Los Angeles, Calif.)

Found: Sodium hydroxide 93.20 per cent; sodium carbonate 2.12 per cent. *Calif. Dept. Agr., Spec. Pub.* 101: 83. 1930.

Fresnol Ant Poison

(Fresnol Products Incorporated)

	Guaranteed	Found
Arsenic	0.17	0.18

Calif. Dept. Agr., Spec. Pub. 101: 20. 1930.

Fresnol Disinfectant

(Fresnol Products, Inc., Van Nuys, Calif.)

	Guaranteed	Found
Sodium hypochlorite	5.50	3.95

Calif. Dept. Agr., Spec. Pub. 101: 80. 1930.

Fumex Moth Killer

See Paradichlorbenzene.

Fungtrogen Spray

(Germain Seed & Plant Co., Los Angeles, Calif.)

	Guaranteed	Found
Copper	0.80	0.81

Calif. Dept. Agr., Spec. Pub. 101: 40. 1930.

G

Garden Volck

See Oil Emulsions, Mineral.

Germo Carboline Paint

(Germo Manufacturing Co., Long Beach, Calif.)

Guaranteed: Water 1.50 per cent.

Found: Phenols 2.36 per cent; tar oils 52.05 per cent; mineral oils 42.80 per cent; water 0.10 per cent.—*Calif. Dept. Agr., Spec. Pub.* 101: 70. 1930.

Germo Creosote Disinfectant Dip

See Phenol Soap Solutions.

Germo Pine-Ol

(Germo Manufacturing Co., Los Angeles, Calif.)

Guaranteed: Water 15.00 per cent.

Found: Total oils 78.20 per cent; soap 16.80 per cent; water 4.00 per cent; sample is a pine oil preparation.—*Calif. Dept. Agr., Spec. Pub.* 101: 77. 1930.

Germo Pynol Emulsion

(Germo Manufacturing Co., Los Angeles, Calif.)

Guaranteed: Pine oil 35.00 per cent.

Found: Mineral oil 38.00 per cent; total oil 36.40 per cent; soap 18.00 per cent; water 4.80 per cent.—*Calif. Dept. Agr., Spec. Pub.* 101: 77. 1930.

Germo Sodochlorite

(The Germo Manufacturing Co., Santa Cruz, Calif.)

	Guaranteed	Found
Available chlorine	4.00	3.94

Calif. Dept. Agr., Spec. Pub. 101: 80. 1930.

Gets-Em Ant Powder

(Brunswig Drug Co., Los Angeles, Calif.)

	Guaranteed	Found
Sodium fluoride	71.00	72.00
Pyrethrum	4.00	....
Organic matter	....	4.34

Calif. Dept. Agr., Spec. Pub. 101: 78. 1930.

Gold Leaf Tobacco Powder

See Nicotine Dusts.

Gopher Bane

See Strychnine Preparations.

Gwin's Citrus Spray

See Oil Emulsions, Mineral.

H

Hay's "Bite-Not"

(H. H. Hay Sons, Portland, Maine)

Found: The preparation is an oil containing citronella.—*Maine Agr. Expt. Sta., Official Inspections* 134: 115. 1929.

Hay's Black Fly Lotion

(H. H. Hay Sons, Portland, Maine)

Found: The preparation is an oil containing oil of tar and citronella.—*Maine Agr. Expt. Sta., Official Inspections* 134: 115. 1929.

Hay's "Exit" Bug Fluid

(H. H. Hay Sons, Portland, Maine)

Found: The preparation is a mixture of gasoline and oil of tar.—*Maine Agr. Expt. Sta., Official Inspections* 134: 115. 1929.

Hay's "Exit" Bug Powder

(H. H. Hay Sons, Portland, Maine)

Found: Borax present.—*Maine Agr. Expt. Sta., Official Inspections* 134: 115. 1929.

Hi-Test Pyrethrum Insect Powder

See Pyrethrum.

Hi-Test Sheep Dip

(Purity Chemical Products Co.)

	Guaranteed	Found	Guaranteed	Found
Phenols	10.00	21.66	10.00	16.36
Soap	....	20.00	....	23.70
Mineral oils	....	26.60	....	....
Non-mineral oils	....	22.71	....	45.29
Water	....	8.00	....	10.30

Calif. Dept. Agr., Spec. Pub. 101: 74. 1930.

Hockwald's Chloricide

(Hockwald Chemical Co., San Francisco, Calif.)

	Guaranteed	Found
Available chlorine	4.00	8.55

Calif. Dept. Agr., Spec. Pub. 101: 80. 1930.

Hockwald's Sheep Dip

See Phenol Soap Solutions.

Holly Brand Lye

(Clipper Chemical Co., Inc., Los Angeles, Calif.)

	Guaranteed	Found
Sodium hydroxide	94.00	93.60
Sodium carbonate	2.00	1.60

Calif. Dept. Agr., Spec. Pub. 101: 83. 1930.

Holmerden Weed Destroyer

(The Holmerden Co., Stratford, Conn.)

Found: Sodium arsenate 46.25 per cent.—*Maine Agr. Expt. Sta., Official Inspections* 134: 115. 1929.

Hyp-O-Sol

(Braun-Knecht-Heimann Co., San Francisco, Calif.)

	Guaranteed	Found
Available chlorine	4.50	3.75

Calif. Dept. Agr., Spec. Pub. 101: 80. 1930.

I

Imperial Sheep Dip

See Phenol Soap Solutions.

Imperial Spray Emulsion

See Oil Emulsions, Mineral.

J

Dwight Judson's Ideal Spray Oil—1930

See Oil Emulsions, Mineral.

K

Kazol

See Oil Emulsions, Mineral.

Kellogg's Ant Paste

(Johnson, Carvell & Murphy, Los Angeles, Calif.)

	Guaranteed	Found
Arsenic	6.00	8.26

Calif. Dept. Agr., Spec. Pub. 101: 20. 1930.

Key Brand Ansect

(Interstate Chemical Co., Jersey City, N. J.)

Found: The preparation is a soap solution.—*Maine Agr. Expt. Sta., Official Inspections* 134: 115. 1929.

Key Brand Fish Oil Soap

See Soaps.

Kiku Dust Special Mix No. 500

(Pacific Coast Chemical Co.)

Guaranteed: Nicotine 0.40 per cent; pyrethrum insecticide 12.00 per cent.
Found: Nicotine 0.96 per cent.—*Calif. Dept. Agr., Spec. Pub.* 101: 35. 1930.

Kiku Dust Special No. 100

(Pacific Coast Chemical Co.)

Guaranteed: Nicotine 1.40 per cent; pyrethrum insecticide 4.00 per cent.
Found: Nicotine 1.55 per cent.—*Calif. Dept. Agr., Spec. Pub.* 101: 35. 1930.

Kill 'Em Fluid

(Brewer & Co., Inc., Worcester, Mass.)

Guaranteed: Active ingredients 100 per cent.
Found: Carbon tetrachloride and phenol in a kerosene base.—*Maine Agr. Expt. Sta., Official Inspections* 134: 115. 1929.

Kills-A-Bug

(Superl Manufacturing Co., Los Angeles, Calif.)

Found: Trace of water present.—*Calif. Dept. Agr., Spec. Pub.* 101: 84. 1930.

Kilsants Ant Paste

(Brunswig Drug Co., Los Angeles, Calif.)

	Guaranteed	Found
Arsenic	7.82	9.38

Calif. Dept. Agr., Spec. Pub. 101: 20. 1930.

Kilsnayl

(California Copper Producer's Trust)

	Guaranteed	Found
Ferrous sulfate ($FeSO_4$)	20.00	31.20
Ferric sulfate ($Fe_2(SO_4)_3$)	20.00	30.37
Copper sulfate ($CuSO_4$)	45.00	3.48

Calif. Dept. Agr., Spec. Pub. 101: 85. 1930.

Kil-Ve

(Schwarz Druggists, Inc., Newark, N. J.)

Found: Volatile at 100° C., 98.45 per cent; non-volatile, 1.55 per cent.—*Maine Agr. Expt. Sta., Official Inspections* 134: 115. 1929.

King Pin Brand Lye

(Sinclair Manufacturing Co., Los Angeles, Calif.)

	Guaranteed	Found
Sodium hydroxide	94.00	93.60
Sodium carbonate	2.00	2.12

Calif. Dept. Agr., Spec. Pub. 101: 83. 1930.

Kleenup Emulsion—March 13

See Oil Emulsions, Mineral.

Kleenup Oil Stock

See Oils, Mineral.

Kliko Disinfectant

(Columbia Soap Co., San Francisco, Calif.)

Guaranteed: Water 12.00 per cent.

Found: Total oils 65.09 per cent; soap 24.09 per cent; water 10.00 per cent; sample is a pine oil preparation.—*Calif. Dept. Agr., Spec. Pub.* 101: 77. 1930.

Kliko Insecticide

(Columbia Soap Co., San Francisco, Calif.)

No analysis.—*Calif. Dept. Agr., Spec. Pub.* 101: 84. 1930.

Kliko Roach Powder

(Columbia Soap Co., San Francisco, Calif.)

Guaranteed: Sodium fluoride 65.00 per cent; pyrethrum 35.00 per cent.

Found: Sodium fluoride 60.24 per cent; organic matter 35.90 per cent.—*Calif. Dept. Agr., Spec. Pub.* 101: 78. 1930.

K O I L Creosote Stock Dip

See Phenol Soap Solutions.

Kreo-Phene Crude Carbolic Acid

(Purity Chemical Co.)

Found: Phenols 31.50 per cent; tar oils 66.34 per cent; water 0.30 per cent.—*Calif. Dept. Agr., Spec. Pub.* 101: 71. 1930.

K. R. O.

(K. R. O. Co., Springfield, Ohio)

Found: The preparation is red squill.—*Maine Agr. Expt. Sta., Official Inspections* 134: 115. 1929.

L

L. A. Dust No. 26

(Los Angeles Insecticide Co.)

	Guaranteed	Found
Nicotine	2.00	2.44
Total arsenic	3.80	4.28
Water-soluble arsenic	0.50	0.19

Calif. Dept. Agr., Spec. Pub. 101: 33. 1930.

L. A. Dust No. 28

(Los Angeles Insecticide Co.)

	Guaranteed	Found
Nicotine	3.00	2.48
Total arsenic	3.80	3.70
Water-soluble arsenic	0.50	0.15

Calif. Dept. Agr., Spec. Pub. 101: 33. 1930.

Larkspur Lotion

(Brewer & Co., Inc., Worcester, Mass.)

Found: The preparation is an aqueous larkspur lotion. Volatile at 100° C., 97.87 per cent; non-volatile, 2.13 per cent.—*Maine Agr. Expt. Sta., Official Inspections* 134: 115. 1929.

Lead Arsenate

See Niagara Arsenate of Lead.

Lead Arsenate—Bordeaux Mixture

See Bordeaux Mixture—Lead Arsenate.

Lead Arsenate Dust No. 21

(California Spray Chemical Co.)

	Guaranteed	Found
Arsenic pentoxide (As_2O_5)	6.00	6.04

Calif. Dept. Agr., Spec. Pub. 101: 22. 1930.

Lectro Bleach

(Great Western Electro-Chemical Co., San Francisco, Calif.)

	Guaranteed	Found
Available chlorine	16.00	14.21

Calif. Dept. Agr., Spec. Pub. 101: 80. 1930.

Lee's Dip

See Phenol Soap Solutions.

Leinen's Sow-Bug-Co.

(John F. Leinen Chemical Co., Oakland, Calif.)

Guaranteed: Paris Green 12.50 per cent.

Found: Arsenic 9.12 per cent.—*Calif. Dept. Agr., Spec. Pub.* 101: 21. 1930.

Lilly's Tobacco Soap Spray

(The Chas. H. Lilly Co.)

	Guaranteed	Found
Nicotine	2.00	2.44
Soap	6.00	4.13
Water	....	91.50

Calif. Dept. Agr., Spec. Pub. 101: 38. 1930.

Lime, Chlorinated

See Acme Chlorinated Lime; Sinclair Chieftain Brand Chlorinated Lime.

Lime, Hydrated

(E. M. Ives, Meriden, Conn.)

Found: 95 per cent passed a 300 mesh sieve.—*Conn. Agr. Expt. Sta., Sample* 6915.

Lime Sulfur, Dry

See Niagara Dry Lime Sulfur.

Lime-Sulfur Solution

See Table 5.

Liquid Whale Oil Soap

See Soap.

Liquor Cresolis

See Phenol Soap Solutions.

Los Angeles Dust No. 8

See Nicotine Dusts.

TABLE 5. LIME SULFUR SOLUTION

Manufacturer or distributor or brand	Calcium polysulfide		Calcium thiosulfate		Calcium sulfate	Baumé gravity, degrees		Publication
	Guaranteed	Found	Guaranteed	Found	Found	Guaranteed	Found	
	%	%	%	%	%			
California Spray Chemical Co., Del Monte	26.00	30.44	2.00	1.46	....	31.00	31.97	Calif. Dept. Agr., Spec. Pub. 101: 26. 1930.
H. P. Deming, Winsted, Conn.[1]	....	29.42	....	1.45	0.13	....	....	Conn. Agr. Expt. Sta., Sample 1857.
General Chemical Co., Orchard Brand	29.00	30.47	....	1.45	....	32.00	32.11	Calif. Dept. Agr., Spec. Pub. 101:27. 1930.
Manufacturer unknown[2]	....	30.55	....	2.75	0.30	....	....	Conn. Agr. Expt. Sta., Sample 5372.
San José Spray Manufacturing Co., San José Brand	29.00	30.52	1.50	1.48	....	31.00	32.08	Calif. Dept. Agr., Spec. Pub. 101:28. 1930.
Small's Seed Co., Riverside, Calif. Small's	27.90	31.07	2.10	1.44	....	32.00	32.50	Calif. Dept. Agr., Spec. Pub. 101:28. 1930.

1 Sulfide sulfur 22.74 percent; thiosulfate sulfur 0.61 percent; sulfate sulfur 0.03 percent; calcium oxide 9.94 percent.

2 Phenol, trace; water, 66.40 percent.

Luseaux No. 2 for Worms

(The Luseaux Laboratories)

	Guaranteed	Found
Nicotine	....	1.34
Water	80.00	73.00

Calif. Dept. Agr., Spec. Pub. 101: 36. 1930.

Lye

See B. T. Babbitt's Concentrated Lye; Fort Industry Brand Lye; Holly Brand Lye; King Pin Brand Lye; Rex Lye.

M

Maas Mite Spray

(Arthur R. Maas Laboratories, Los Angeles, Calif.)

Guaranteed: Water 5.00 per cent.

Found: Phenols 17.20 per cent; tar oils 24.56 per cent; mineral oils 57.54 per cent; water 0.10 per cent.—*Calif. Dept. Agr., Spec. Pub.* 101: 70. 1930.

Maas Sheep Dip

See Phenol Soap Solutions.

Malloch's Flea Powder

(Brunswig Drug Co., Los Angeles, Calif.)

Guaranteed: Talcum 5.00 per cent.

Found: Naphthalene 37.64 per cent; sulfur 56.23 per cent; talcum 4.93 per cent.—*Calif. Dept. Agr., Spec. Pub.* 101: 85. 1930.

Mapco Liquid Whale Oil Soap

See Soaps.

Mapco Liquor Cresolis Compound U. S. P.

See Phenol Soap Solutions.

Marcol

See Oils, Mineral.

McClellan's Ant Powder

(C. U. McClellan & Co.)

	Guaranteed	Found
Sodium fluoride	70.00	71.27
Pyrethrum	20.00	....
Organic matter	....	15.50

Calif. Dept. Agr., Spec. Pub. 101: 78. 1930.

McClellan's Cartholineum

(C. U. McClellan & Co.)

Found: Phenols 9.66 per cent; tar oils 76.88 per cent; mineral oils 10.00 per cent; water 0.05 per cent.—*Calif. Dept. Agr., Spec. Pub.* 101: 70. 1930.

McClellan's Compound Lice Powder containing Sodium Fluoride

(C. U. McClellan & Co., Santa Barbara, Calif.)

	Guaranteed	Found
Nicotine	0.10	0.27
Sulfur	26.00	26.46
Phenols	1.50	1.60
Sodium fluoride	30.00	29.70

Calif. Dept. Agr., Spec. Pub. 101: 35. 1930.

McClellan's Cresolis

See Phenol Soap Solutions.

McClellan's Delousing Grease

See Sodium Fluoride.

McClellan's Disinfectant Dip

See Phenol Soap Solutions.

McClellan's Improved Red Mite and Lice Killer

(C. U. McClellan Co.)

Guaranteed: Water 1.00 per cent.
Found: Phenols 3.70 per cent; tar oils 37.55 per cent; mineral oils 58.63 per cent.—*Calif. Dept. Agr., Spec. Pub.* 101: 71. 1930.

McClellan's Moth Nip

(C. U. McClellan & Co., Los Angeles, Calif.)

No analysis.—*Calif. Dept. Agr., Spec. Pub.* 101: 84. 1930.

McClellan's Moth Nip Block

See Paradichlorbenzene.

McClellan's Plant Spray

(C. U. McClellan & Co., Los Angeles, Calif.)

Guaranteed: Water 85.00 per cent.
Found: Nicotine 1.26 per cent; soap 12.37 per cent; water 84.00 per cent.—*Calif. Dept. Agr., Spec. Pub.* 101: 38. 1930.

McClellan's Poultry House Spray

(C. U. McClellan Co.)

Guaranteed: Water 2.00 per cent.
Found: Phenols 13.02 per cent; tar oils 81.41 per cent; water 3.80 per cent.—*Calif. Dept. Agr., Spec. Pub.* 101: 70. 1930.

McClellan's Poultry Prescription 999

(C. U. McClellan & Co., Los Angeles, Calif.)

Found: Nicotine 0.66 per cent.—*Calif. Dept. Agr., Spec. Pub.* 101: 36. 1930.

McClellan's Rat Ruin

(C. U. McClellan & Co., Inc., Los Angeles, Calif.)

	Guaranteed	Found
Barium carbonate	96.00	99.35

Calif. Dept. Agr., Spec. Pub. 101: 43. 1930.

McClellan's Sept-A-Soil

(C. U. McClellan Co.)

Found: Iodine trace; phenols 2.20 per cent; tar oils 30.11 per cent; mineral oils 67.70 per cent.—*Calif. Dept. Agr., Spec. Pub.* 101: 71. 1930.

McClellan's Sheep Dip

See Phenol Soap Solutions.

McEverlast Sodium Arsenite

(McRae Paint Products Co., Los Angeles, Calif.)

Found: Arsenic trioxide 28.93 per cent.—*Calif. Dept. Agr., Spec. Pub.* 101: 18. 1930.

McEverlast Termite Gas

(McRae Paint Products Co., Los Angeles, Calif.)

No analysis.—*Calif. Dept. Agr., Spec. Pub.* 101: 84. 1930.

McEverlast Termite Special

(McRae Paint Products Co., Los Angeles, Calif.)

No analysis.—*Calif. Dept. Agr., Spec. Pub.* 101: 84. 1930.

F. W. McNess Insect Powder

See Pyrethrum.

Medina Brand Process Blue Dust

Medina Brand Process Blue Dust 9%

See Bordeaux Mixture.

Medina Copper Arsenic Dust 8–9

(New York Insecticide Co., Medina, N. Y.)

	Guaranteed	Found
Total arsenic	6.03	5.93
Total copper	7.16	7.68

Maine Agr. Expt. Sta., Official Inspections 138: 104. 1930.

Medina Process Copper Arsenic Dust

(New York Insecticide Co., Inc., Medina, N. Y.)

	Guaranteed	Found
Total arsenic	6.03	7.50
Total copper	7.16	7.64

Maine Agr. Expt. Sta., Official Inspections 134: 113. 1929.

Mercury Preparations

See Ceresan Dust; Nu-Green.

Mineral Oil 12–71–5

Mineral Oil 12–71–6

Mineral Seal Oil

See Oils, Mineral.

Mirakol Medium Light Special

Mirakol Medium Special

Mission Brand Insecto Light

Mission Brand Insecto Medium

See Oil Emulsions, Mineral.

Mission Sodium Arsenite Solution

(Los Angeles Chemical Co., Los Angeles, Calif.)

	Guaranteed	Found
Sodium arsenite	50.00	62.75

Calif. Dept. Agr., Spec. Pub. 101: 18. 1930.

Moth-Gas Clothes Savers

See Paradichlorbenzene.

Mouse Seed

See Strychnine Preparations.

N

Naphthalene Oil, Crude

(Koppers Products Co.)

Found: Flash point, 85° C.; volatile at 100° C. in 4 hours, 98.8 per cent; distilling below 200°, 19 per cent.—*Conn. Agr. Expt. Sta., Sample* 9314.

Naphthaline Flake

(Cook, Everett & Pennell, Portland, Maine)

Found: The substance is naphthalene.—*Maine Agr. Expt. Sta., Official Inspections* 134: 115. 1929.

Naphthaline Balls

(Cook, Everett & Pennell, Portland, Maine)

Found: The preparation is naphthalene.—*Maine Agr. Expt. Sta., Official Inspections* 134: 115. 1929.

Navco—Arsen—Deaux Dust

(Chas. C. Navlet Co.)

	Guaranteed	Found
Total arsenic	0.75	0.70
Copper	1.25	1.90

Calif. Dept. Agr., Spec. Pub. 101: 16. 1930.

Navco Paradichlor

See Paradichlorbenzene.

Navco Snail and Slug Destroyer

(Chas. C. Navlet Co., Oakland, Calif.)

Guaranteed: Tricalcium arsenate 3.00 per cent.

Found: Arsenic 2.22 per cent.—*Calif. Dept. Agr., Spec. Pub.* 101: 21. 1930.

Niagara Arsenate of Lead

(Niagara Sprayer Co., Middleport, N. Y.)

Guaranteed: Lead arsenate 98 per cent; inert 2 per cent; total arsenic pentoxide 30 per cent; total arsenic 19.5 per cent; water-soluble arsenic 0.50 per cent.

Found: (three samples)

Sample	2012	2013	2014
Water soluble arsenic pentoxide	0.32	0.21	0.57
Water soluble arsenic, metal	0.21	0.14	0.37

Conn. Agr. Expt. Sta.

Niagara Arsenate of Lead and Sulphur

See Arsenate of Lead and Sulphur.

Niagara Dry Lime Sulphur

(Niagara Sprayer & Chemical Co.)

	Guaranteed	Found
Calcium polysulfide	64.00	74.50
Calcium thiosulfate	6.00	10.18
Free sulfur	15.00	3.44

Calif. Dept. Agr., Spec. Pub. 101: 29. 1930.

Niagara Dry Mix

(Niagara Sprayer Co., Middleport, N. Y.)

	Guaranteed	Found
Sulfur	61.00	60.92
Inert	39.00	....

Conn. Agr. Expt. Sta., Sample 1280.

Niagara Du-Copper

(Niagara Sprayer Co., Middleport, N. Y.)

	Guaranteed	Found
Copper	34.72	33.60

Maine Agr. Expt. Sta., Official Inspections 138: 105. 1930.

Niagara Dust Mixture with Nicotine No. 10

See Nicotine Dusts.

Niagara Pomodust

See No. 4 Niagara Pomodust.

Niagara Pomo-Green

(Niagara Sprayer & Chemical Co., Inc., Middleport, N. Y.)

	Guaranteed	Found
Sulfur	71.00	75.68
Total arsenic	1.95	2.54
Water-soluble arsenic	0.50	0.11

Maine Agr. Expt. Sta., Official Inspections 138: 106. 1930.

Niagara Spud Brand Dust

See Bordeaux Mixture.

Nico Dust No. 7

Nico Dust No. 9

See Nicotine Dusts.

Nico Dust No. 20

(Western Wholesale Drug Co.)

	Guaranteed	Found
Nicotine	2.00	2.61
Total arsenic	3.90	4.00
Water-soluble arsenic	0.14	0.17

Calif. Dept. Agr., Spec. Pub. 101: 34. 1930.

Nico Dust No. 21

(Western Wholesale Drug Co.)

	Guaranteed	Found
Nicotine	2.75	3.17
Total arsenic	3.90	3.94
Water-soluble arsenic	0.14	0.19

Calif. Dept. Agr., Spec. Pub. 101: 34. 1930.

Nico Dust No. 30

(Western Wholesale Drug Co.)

	Guaranteed	Found
Nicotine	2.00	2.58
Total arsenic	3.50	5.12
Water-soluble arsenic	0.30	0.17

Calif. Dept. Agr., Spec. Pub. 101: 34. 1930.

Nico Dust No. 31

(Western Wholesale Drug Co.)

	Guaranteed	Found
Nicotine	2.75	3.20
Total arsenic	3.50	5.09
Water-soluble arsenic	0.30	0.15

Calif. Dept. Agr., Spec. Pub. 101: 34. 1930.

Nico-Dust No. 79

(Western Wholesale Drug Co.)

	Guaranteed	Found	Guaranteed	Found
Calcium arsenate	35.00	32.60	34.00	34.10
Total arsenic	13.00	12.30	12.50	12.85
Water-soluble arsenic	0.40	0.15	0.30	0.04

Calif. Dept. Agr., Spec. Pub. 101: 17. 1930.

Nico-Dust No. 102

See Bordeaux Mixture.

Nico-Dust No. 104

(Western Wholesale Drug Co.)

	Guaranteed	Found
Total arsenic	8.40	9.41
Water-soluble arsenic	0.40	0.12
Copper	7.00	7.37

Calif. Dept. Agr., Spec. Pub. 101: 16. 1930.

Nicotine Dusts

See Table 6.

Nicotine-Sulfur Dust

See Calispray No. 3—10% Dust.

Nicotrol

(Kay Laboratories Division of Kay Fries Chemicals, Inc., New York, N. Y.)

Found: Nicotine 2.05 per cent.—*Conn. Agr. Expt. Sta., Sample* 5726.

99 Roach Powder

(Ninety-Nine Chemical Corp., Memphis, Tenn.)

Guaranteed: Inert ingredient carbon not over 1 per cent.

Found: Borax ($Na_2B_4O_7 \cdot 5\ H_2O$) 99.9 per cent; water-insoluble 0.36 percent.—Conn. Agr. Expt. Sta., Sample 9046.

Nuc-Oleum

See Phenol Soap Solutions.

Nu-Green

(Bayer-Semesan Co.)

Guaranteed: Hydroxymercurichlorphenol sulfate 15.00 per cent.

Found: Mercury 11.89 per cent.—*Calif. Dept. Agr., Spec. Pub.* 101: 82. 1930.

No. 1 Dual Nicocides

(Hercules Glue Co., Van Nuys, Calif.)

Found: Nicotine 5.30 per cent.=0.0689 grams per capsule.—*Calif. Dept. Agr., Spec. Pub.* 101: 36. 1930.

No. 1 Roundworm Nicocides

(Hercules Glue Co., Van Nuys, Calif.)

Found: Nicotine 5.78 per cent.=0.069 grams per capsule.—*Calif. Dept. Agr., Spec. Pub.* 101: 36. 1930.

No. 2 Dual Nicocides

(Hercules Glue Co., Van Nuys, Calif.)

Found: Nicotine 5.93 per cent.=0.0593 grams per capsule.—*Calif. Dept. Agr., Spec. Pub.* 101: 36. 1930.

No. 2 Roundworm Nicocides

(Hercules Glue Co., Van Nuys, Calif.)

Found: Nicotine 5.97 per cent.=0.0561 grams per capsule.—*Calif. Dept. Agr., Spec. Pub.* 101: 36. 1930.

TABLE 6. NICOTINE DUSTS

Manufacturer or distributor and brand	Nicotine		Publication
	Guaranteed	Found	
	%	%	
California Spray Chemical Co. Ortho Nicotine Dust 8 Special	2.88	3.20	Calif. Dept. Agr., Spec. Pub. 101:31. 1930.
California Spray Chemical Co. Ortho Nicotine Dust No. 10	3.60	4.09	Calif. Dept. Agr., Spec. Pub. 101:31. 1930.
California Spray Chemical Co. Ortho Nicotine Dust 6 Special	2.00	2.64	Calif. Dept. Agr., Spec. Pub. 101:31. 1930.
California Sprayer Co. Calispray No. 15—7½% Dust	2.70	2.80	Calif. Dept. Agr., Spec. Pub. 101:31. 1930.
The California Sprayer Co. Calispray No. 16—10% Dust	3.70	3.88	Calif. Dept. Agr., Spec. Pub. 101:31. 1930.
Insecticide Supply Co. Dustall No. 4	1.00	1.41	Calif. Dept. Agr., Spec. Pub. 101:31. 1930.
Los Angeles Insecticide Co., Los Angeles, Calif. Los Angeles Dust No. 8	3.00	2.93	Calif. Dept. Agr., Spec. Pub. 101:31. 1930.
Niagara Sprayer & Chemical Co., Niagara Dust Mixture with Nicotine No. 10	3.25	3.82	Calif. Dept. Agr., Spec. Pub. 101:31. 1930.
Tobacco By-Products & Chemical Corp. Gold Leaf Tobacco Powder	1.00	1.59	Calif. Dept. Agr., Spec. Pub. 101:31. 1930.
Uniform Products Co., San Francisco, Calif. Tobacco Dust	0.50	1.07	Calif. Dept. Agr., Spec. Pub. 101:32. 1930.
Western Wholesale Drug Co. Nico Dust No. 7	2.50	2.36	Calif. Dept. Agr., Spec. Pub. 101:32. 1930.
Western Wholesale Drug Co. Nico Dust No. 9	....	4.38	Calif. Dept. Agr., Spec. Pub. 101:32. 1930.

No. 4 Niagara Pomodust

(Niagara Sprayer & Chemical Co.)

	Guaranteed	Found
Total arsenic	1.76	2.15
Water-soluble arsenic	0.50	0.23
Lead oxide	....	5.95
Sulfur	87.00	88.61

Calif. Dept. Agr., Spec. Pub. 101: 16. 1930.

O

O-Bit Insect Powder

(The Holmerden Co., Stratford, Conn.)

See Pyrethrum.

O-Cedar Spray

(O-Cedar Corporation, Chicago, Ill.)

Found: Contains oil of cedar.—*Maine Agr. Expt. Sta., Official Inspections* 138: 106. 1930.

Oil

(This is an experimental mixture of 80 per cent "Wyrol" and 20 per cent cottonseed oil made by Mr. Turner of the Entomology Department of the Connecticut Agricultural Experiment Station.)

Found: Saybolt viscosity at 100° F., 147.6 seconds.—*Conn. Agr. Expt. Sta., Sample* 954.

Oil Emulsions, Mineral

See Table 7.

Oils, Mineral

See Table 8.

Oil Soluble Sulfonate

(Standard Oil Co. of New Jersey)

Found: Total ash 10.70 per cent; soap 0.16 per cent; non-soap ash 10.67 per cent.—*Conn. Agr. Expt. Sta., Sample* 6167.

Oil, White

See Oils, Mineral.

O. K. Soluble Pine Oil

(Andrew Wilson, Springfield, N. J.)

Found: Water 6.1 per cent; ash 1.81 per cent; soap (as potassium oleate) 8.11 per cent; oil (by difference) 85.79 per cent; phenols none or trace. The oil was fluid at 100° C. and of the consistency of vaseline at room temperature; refractive index, 20° C., 1.484.—*Conn. Agr. Expt. Sta., Sample* 1558.

Old English Lawn Klenser

(The Philadelphia Seed Co., Philadelphia, Pa.)

Found: Water 3.17 per cent; ash 57.65 per cent; total nitrogen 2.71 per cent; ammonia nitrogen 0.03 per cent; silica 5.72 per cent; total arsenic pentoxide 14.49 per cent; water-soluble arsenic pentoxide 0.00 per cent; lead oxide 27.05 per cent; ferric oxide 7.60 per cent; aluminum oxide 1.99 per cent; calcium oxide 0.59 per cent; magnesium oxide 0.74 per cent; potassium oxide 0.20 per cent; chromium, copper, chloride and phosphate traces; no carbonate; organic matter probably tankage.

ESTIMATED COMPOSITION:

Lead Arsenate ($PbHAsO_4$)	41.54
Ferric oxide (Fe_2O_3)	7.60
Aluminum oxide (Al_2O_3)	1.99
Silica (SiO_2)	5.72
Magnesium oxide (MgO)	0.74
Calcium phosphate $Ca_3(PO_4)_2$	1.09
Potassium chloride (KCl)	0.32
Ammonium chloride (NH_4Cl)	0.11
Protein	16.75
Water	3.17
Non-protein organic matter	20.97

Conn. Agr. Expt. Sta., Sample 1388.

Orange-Ol

See Oil Emulsions, Mineral.

Ortho Carbolic Disinfectant

See Phenol Soap Solutions.

Ortho Instant Blue Stone

See Copper Sulphate.

Ortho Kleenup Oil Grade A
Ortho Kleenup W
Ortho K Light Medium
Ortho K Medium

See Oil Emulsions, Mineral.

Ortho Nicotine Dust No. 10
Ortho Nicotine Dust 6 Special
Ortho Nicotine Dust 8 Special

See Nicotine Dusts.

Ortho White Arsenic

(California Spray Chemical Co.)

	Guaranteed	Found
Arsenic trioxide	99.50	99.35

Calif. Dept. Agr., Spec. Pub. 101: 22. 1930.

P

Palvex Flea and Lice Powder

(Wm. Cooper & Nephews, Inc.)

No analysis.—*Calif. Dept. Agr., Spec. Pub.* 101: 84. 1930.

Paradichlorbenzene

See Table 9.

Paris Green

See Table 10.

Patex Potential Bleach

(Patek & Co., San Francisco, Calif.)

	Guaranteed	Found
Available chlorine	16.00	16.55

Calif. Dept. Agr., Spec. Pub. 101: 81. 1930.

TABLE 7. OIL EMULSIONS, MINERAL

Manufacturer or distributor and brand	Oil		Phenols	Soap	Water		Constants of separated oil			Publication
	Guaranteed	Found	Found	Found	Guaranteed	Found	Baumé gravity, degrees	Saybolt viscosity, 100°F. seconds	Unsulfonated	
	%	%	%	%	%	%			%	
Anaheim Spray Chemical Co., Anaheim, Calif. Blue Ribbon Orchard Spray No. 2	....	77.33	....	2.54	....	18.90	31.37	71.0	95.0	Calif. Dept. Agr., Spec. Pub. 101: 46. 1930.
Anaheim Spray Chemical Co., Upland, Calif. Blue Ribbon Orchard Spray No. 4	....	80.30	....	2.10	....	17.50	29.50	70.0	90.8	Calif. Dept. Agr., Spec. Pub. 101: 46. 1930.
Anaheim Spray Chemical Co., Upland, Calif. Blue Ribbon Special Orchard Spray	....	78.65	....	2.25	....	18.20	30.60	61.5	90.7	Calif. Dept. Agr., Spec. Pub. 101: 46. 1930.
Apothecaries Hall Co., Waterbury, Conn. Victor Soluble Oil[1]	....	81.70	....	....	....	....	....	93.5	50.6	Conn. Agr. Expt. Sta., Sample 3039.
Apothecaries Hall Co., Waterbury, Conn. Victor Soluble Oil (Jarvis Formula)—1930 Stock[2]	....	75.3	....	7.89	....	....	....	115.6	60.2	Conn. Agr. Expt. Sta. Sample 6543.
Associated Oil Co. Avon Spray Emulsion	84.00	84.50	....	....	....	14.60	21.28	109.0	70.7	Calif. Dept. Agr., Spec. Pub. 101: 50. 1930.

Associated Oil Co. Avon Spray Emulsion B	....	85.50	....	....	....	14.50	19.70	111.0	64.0	Calif. Dept. Agr., Spec. Pub. 101: 50. 1930.
Associated Oil Co. Petrotine Emulsion C-2	....	84.95	....	....	....	14.65	27.95	75.0	89.9	Calif. Dept. Agr., Spec. Pub. 101: 50. 1930.
Associated Oil Co. Petrotine Emulsion 60	83.00	85.13	....	....	....	14.27	27.80	58.3	87.6	Calif. Dept. Agr., Spec. Pub. 101: 50. 1930.
Associated Oil Co. Petrotine Emulsion 70	....	85.08	....	....	....	14.83	27.25	71.8	87.4	Calif. Dept. Agr., Spec. Pub. 101: 50. 1930.
Associated Oil Co. Petrotine Emulsion 95	....	84.80	....	....	....	14.80	28.80	95.0	90.0	Calif. Dept. Agr., Spec. Pub. 101: 50. 1930.
Balfour-Guthrie Co. Universal Brand Neutrol	....	82.73	....	....	....	16.58	22.38	105.5	71.2	Calif. Dept. Agr., Spec. Pub. 101: 51. 1930.
Balfour-Guthrie Co. Universal Brand Neutrol A	....	83.30	....	....	....	15.68	23.63	111.3	77.5	Calif. Dept. Agr., Spec. Pub. 101: 51. 1930.
Balfour-Guthrie Co. Universal Brand Nicona[3]	77.00	79.05	....	....	....	17.00	28.65	67.0	89.6	Calif. Dept. Agr., Spec. Pub. 101: 51. 1930.
Balfour-Guthrie Co. Universal Brand Viscona E Medium	....	84.40	....	....	....	14.10	31.90	76.0	94.4	Calif. Dept. Agr., Spec. Pub. 101: 51. 1930.
Balfour-Guthrie Co. Universal Brand Viscona Heavy	82.00	82.90	....	....	....	15.00	28.70	91.0	92.0	Calif. Dept. Agr., Spec. Pub. 101: 51. 1930.
Balfour-Guthrie Co. Universal Brand Viscona W Medium	....	86.10	....	....	....	12.80	28.60	75.0	91.2	Calif. Dept. Agr., Spec. Pub. 101: 51. 1930.
Balfour-Guthrie & Co. Universal Orchard Spray Dormant Soluble Oil	....	86.40	2.90	7.80	....	3.90	....	110.0	68.4	Calif. Dept. Agr., Spec. Pub. 101: 44. 1930.
Balfour-Guthrie & Co. Universal Orchard Spray Triumph	....	85.92	4.89	3.61	13.00	5.18	....	48.8	77.6	Calif. Dept. Agr., Spec. Pub. 101: 44. 1930.
California Rex Spray Co. Rex Oil A	83.00	84.53	....	....	....	14.70	22.47	126.7	74.8	Calif. Dept. Agr., Spec. Pub. 101: 51. 1930.

[1] Specific gravity of separated oil, 0.865; emulsifying agent probably a cresol soap.
[2] Total ash 1.78%; non-soap ash 0.09%; density of separated oil, 0.847; soap is a potassium soap.
[3] Nicotine, guaranteed 1.00%; found 2.50%.

TABLE 7. OIL EMULSIONS, MINERAL—*Continued*

Manufacturer or distributor and brand	Oil		Phenols	Soap	Water		Constants of separated oil			Publication
	Guaranteed	Found	Found	Found	Guaranteed	Found	Baumé gravity, degrees	Saybolt viscosity, 100°F. seconds	Unsulfonated	
	%	%	%	%	%	%			%	
California Rex Spray Co. Rex Oil B	75.00	81.20	....	....	....	18.18	21.43	111.0	70.5	Calif. Dept. Agr., Spec. Pub. 101: 51. 1930.
California Rex Spray Co. Rex Toxol	83.00	84.25	....	....	....	15.10	22.50	111.5	71.6	Calif. Dept. Agr., Spec. Pub. 101: 52. 1930.
California Spray Chemical Co. Del Monte Heavy	....	92.10	....	....	....	7.95	36.05	71.0	98.5	Calif. Dept. Agr., Spec. Pub. 101: 53. 1930.
California Spray Chemical Co. Del Monte Light Medium	83.00	87.03	....	....	....	12.20	30.17	68.3	89.9	Calif. Dept. Agr., Spec. Pub. 101: 53. 1930.
California Spray Chemical Co. Del Monte Medium.	....	91.40	....	....	....	8.03	33.45	65.8	94.7	Calif. Dept. Agr., Spec. Pub. 101: 53. 1930.
California Spray Chemical Co. Garden Volck[4]	....	33.40	....	10.17	....	50.87	29.85	104.0	98.2	Calif. Dept. Agr., Spec. Pub. 101: 46. 1930.
California Spray Chemical Co., Watsonville, Calif. Kleenup Emulsion— March 13	....	....	....	....	....	....	....	95.0	64.2	Conn. Agr. Expt. Sta., Sample 3792.
California Spray Chemical Co. Orange-Ol	....	85.06	....	....	....	14.02	30.38	63.5	90.8	Calif. Dept. Agr., Spec. Pub. 101: 54. 1930.
California Spray Chemical Co. Orthol K Light Medium	....	84.35	....	....	....	15.50	30.20	67.0	91.6	Calif. Dept. Agr., Spec. Pub. 101: 53. 1930.

California Spray Chemical Co. Orthol K Medium...	....	84.92	....	....	....	14.32	28.84	85.4	90.5	Calif. Dept. Agr., Spec. Pub. 101: 53. 1930.
California Spray Chemical Co., NewYork, N.Y. Ortho Kleenup Oil Grade A[5].....	81.00	81.90	....	0.80	....	....	....	110.6	56.0	Conn. Agr. Expt. Sta., Sample 5984.
California Spray Chemical Co. Ortho Kleenup W...	83.00	83.50	....	....	....	16.10	22.20	107.0	66.4	Calif. Dept. Agr., Spec. Pub. 101: 54. 1930.
California Spray Chemical Co., Watsonville, Calif. Volck[6].....	80.00	81.10	....	0.80	....	....	....	105.0	92.4	Conn. Agr. Expt. Sta., Sample 5987.
California Spray Chemical Co. Volck's Miscible No. 2	85.00	90.35	1.70	4.65	....	2.25	....	55.0	79.2	Calif. Dept. Agr., Spec. Pub. 101: 44-45. 1930.
Clipper Chemical Co. Clipper Brand Oil Emulsion...	....	76.67	....	2.20	22.40	20.60	28.77	39.3	68.7	Calif. Dept. Agr., Spec. Pub. 101: 46. 1930.
The Co-Operative Fumigation & Supply Co. Co-Op Brand Spray Emulsion Medium.....	85.00	85.80	....	....	....	....	30.43	61.8	91.2	Calif. Dept. Agr., Spec. Pub. 101: 54. 1930.
Givin Brothers Commercial Sprayers. Givin's Citrus Spray.....	83.00	88.60	....	....	....	11.10	28.60	85.0	89.2	Calif. Dept. Agr., Spec. Pub. 101: 55. 1930.
Imperial Pestocide Manufacturing Co. Imperial Spray Emulsion.....	85.00	90.33	....	....	....	9.22	28.63	85.0	89.2	Calif. Dept. Agr., Spec. Pub. 101: 55. 1930.
Leffingwell Rancho Co. Pest Oil 60.....	85.00	90.70	....	....	....	9.00	30.10	65.5	89.9	Calif. Dept. Agr., Spec. Pub. 101: 56. 1930.
Leffingwell Rancho Co. Pest Oil 80.....	....	89.20	....	....	....	10.66	30.00	77.0	91.5	Calif. Dept. Agr., Spec. Pub. 101: 56. 1930.
Leffingwell Rancho Co. Triple X.....	85.00	91.20	....	....	....	8.80	31.60	62.0	92.0	Calif. Dept. Agr., Spec. Pub. 101: 55. 1930.
Leffingwell Rancho Co. Triple X Heavy.....	....	89.45	....	....	....	9.40	33.85	71.0	95.6	Calif. Dept. Agr., Spec. Pub. 101: 55. 1930.

[4] Nicotine, guaranteed 3.00%; found 3.90%.
[5] Total ash 0.26%; non-soap ash 0.09%; density of separated oil, 0.892.
[6] Total ash 0.56%; non-soap ash 0.39%; density of separated oil, 0.830.

TABLE 7. OIL EMULSIONS, MINERAL—*Continued*

Manufacturer or distributor and brand	Oil		Phenols	Soap	Water		Constants of separated oil			Publication
	Guaranteed	Found	Found	Found	Guaranteed	Found	Baumé gravity, degrees	Saybolt viscosity, 100°F. seconds	Unsulfonated	
	%	%	%	%	%	%			%	
Leffingwell Rancho Co. Triple X Light 50	85.00	88.90	....	....	....	9.60	30.80	69.0	90.8	Calif. Dept. Agr., Spec. Pub. 101: 55. 1930.
Leffingwell Rancho Co. Triple X Medium	90.00	89.80	....	....	....	9.87	33.53	62.2	93.7	Calif. Dept. Agr., Spec. Pub. 101: 55. 1930.
Leffingwell Rancho Co. Triple X 60	90.00	89.93	....	....	....	9.45	31.15	64.0	91.4	Calif. Dept. Agr., Spec. Pub. 101: 55. 1930.
Leffingwell Rancho Co. Triple X 70	....	89.80	....	....	....	9.40	30.60	68.0	92.0	Calif. Dept. Agr., Spec. Pub. 101: 55. 1930.
Los Angeles Chemical Co. Mission Brand Insecto Light	....	85.80	....	....	....	13.90	28.00	62.0	86.0	Calif. Dept. Agr., Spec. Pub. 101: 56. 1930.
Los Angeles Chemical Co. Mission Brand Insecto Medium	85.00	84.75	....	....	....	14.88	27.52	82.6	88.1	Calif. Dept. Agr., Spec. Pub. 101: 56. 1930.
Manufacturer unknown. Dwight Judson's Ideal Spray Oil—1930[7]	....	77.80	....	14.34	....	....	....	189.5	54.0	Conn. Agr. Expt. Sta., Sample 3506.
McClure Chemical Laboratories, Martinez, Calif. Kazo[8]	85.00	....	....	....	....	....	....	....	....	Calif. Dept. Agr., Spec. Pub. 101: 47. 1930.
Mirakol Chemical Co., Fullerton, Calif. Mirakol Medium Light Special	....	72.37	....	3.24	25.00	24.45	29.90	66.0	90.2	Calif. Dept. Agr., Spec. Pub. 101: 47. 1930.

Mirakol Chemical Co., Fullerton, Calif. Mirakol Medium Special	....	71.95	....	2.95	....	25.10	30.10	67.5	90.8	Calif. Dept. Agr., Spec. Pub. 101: 47. 1930.
H. K. Patch, Premek Oil Emulsion Medium	85.00	86.90	....	....	....	12.68	29.85	60.5[9]	93.5	Calif. Dept. Agr., Spec. Pub. 101: 56. 1930.
Peerless Spray Chemical Co. Peerless Light 60 Spray Emulsion	....	86.00	....	....	....	14.00	30.50	62.0	91.2	Calif. Dept. Agr., Spec. Pub. 101: 56. 1930.
Perfecto Spray Manufacturing Co., Walnut, Calif. Anaheim Spray Emulsion[8]	....	....	....	....	....	....	....	....	....	Calif. Dept. Agr., Spec. Pub. 101: 57. 1930.
B. G. Pratt Co., New York, N. Y. Scalecide with Fungicide[10]	....	84.70	....	6.58	9.00	....	....	36.0	44.2	Conn. Agr. Expt. Sta., Sample 5985.
B. G. Pratt Co., New York, N. Y. Scalecide with Fungicide[11]	....	91.40	....	....	....	....	....	43.4	46.0	Conn. Agr. Expt. Sta., Sample 3099.
San José Spray Manufacturing Co. Dormol	....	86.92	....	....	20.00	11.93	24.56	119.4	77.5	Calif. Dept. Agr., Spec. Pub. 101: 57. 1930.
San José Spray Manufacturing Co. Preemol	....	86.50	....	....	20.00	12.40	27.00	104.0	86.4	Calif. Dept. Agr., Spec. Pub. 101: 57. 1930.
San José Spray Manufacturing Co. Summer Oil	80.00	89.50	....	....	....	10.60	29.70	105.0	98.4	Calif. Dept. Agr., Spec. Pub. 101: 57. 1930.
San José Spray Manufacturing Co. Wintrol	....	85.57	....	....	....	13.01	22.85	124.5	69.8	Calif. Dept. Agr., Spec. Pub. 101: 57. 1930.
Sherwin-Williams Co. Sherwin-Williams Light Oil No. 50	83.00	84.23	....	....	....	....	32.13	51.7	93.6	Calif. Dept. Agr., Spec. Pub. 101: 58. 1930.
Sherwin-Williams Co. Sherwin-Williams Medium Oil No. 65	....	83.69	....	....	....	15.86	31.54	61.3	95.1	Calif. Dept. Agr., Spec. Pub. 101: 58. 1930.

[7] Total ash 3.16%; non-soap ash 0.68%.
[8] Emulsion broken; no analysis.
[9] Guaranteed 60.
[10] Guaranteed ammonium and potassium sulfates traces; found, total ash 2.04%; non-soap ash 0.63%; density of separated oil, 0.852; saponifiable matter in separated oil, 1.68%.
[11] Specific gravity, separated oil, 0.851.

TABLE 7. OIL EMULSIONS, MINERAL—*Concluded*

Manufacturer or distributor and brand	Oil		Phenols	Soap	Water		Constants of separated oil			Publication
	Guaranteed	Found	Found	Found	Guaranteed	Found	Baumé gravity, degrees	Saybolt viscosity, 100°F. seconds	Unsulfonated	
	%	%	%	%	%	%			%	
Sherwin-Williams Co. Sherwin-Williams Oil No. 60	....	83.60	....	....	....	15.50	30.40	62.0	90.8	Calif. Dept. Agr., Spec. Pub. 101:58. 1930.
Standard Oil Co. of Indiana. Dendrol [12]	....	93.60	....	3.35	....	....	....	97.0	72.6	Conn. Agr. Expt. Sta., Sample 4499.
Sterling Oil Spray Co. Premier A-1 Spray Emulsion	....	94.20	....	1.60	....	3.80	30.40	62.0	91.2	Calif. Dept. Agr., Spec. Pub. 101:47. 1930.
Sterling Oil Spray Co. Premier, Medium	....	94.48	....	1.70	8.00	3.49	30.83	66.8	94.3	Calif. Dept. Agr., Spec. Pub. 101:47. 1930.
Stewart Oil Products Co., Beverly Hills Calif. Solite Spray	92.00	95.80	....	....	....	2.50	30.70	76.0	94.0	Calif. Dept. Agr., Spec. Pub. 101:58. 1930.
Sun Oil Co., Philadelphia, Pa. Sunoco Self Emulsifying Spray [13]	....	82.10	....	15.03	2.20	....	....	489.5	40.6	Conn. Agr. Expt. Sta., Sample 5986.
Superla Laboratories, Inc., 'Dendrol Dormant Spray Oil [14]	....	83.7 [15]	....	2.69	....	....	....	93.0	61.0	Conn. Agr. Expt. Sta., Sample 5988.
F. J. Trafton Marketing Co. Trafton's Old Reliable Spray Emulsion Medium	85.00	86.50	....	....	....	13.15	28.60	85.5	89.0	Calif. Dept. Agr., Spec. Pub. 101:58. 1930.

[12] Total ash 1.74%; non-soap ash 1.16%.

[13] Guaranteed sodium sulfate 0.8%; petroleum products 97%; found, total ash 3.49%; non-soap ash 0.89%; density of separated oil 0.908.

[14] Guaranteed petroleum oil and emulsifying agent 97%; inert 3%. Found: Total oil 96.3%; total ash 1.91%; non-soap ash 1.45%, density of separated oil 0.866.

[15] Mineral oil.

TABLE 8. OILS, MINERAL

Manufacturer or distributor and brand	Saybolt viscosity, 100° F., seconds	Unsulfonated	Publication
California Spray Chemical Co., Watsonville, Calif. Kleenup Oil Stock	96.3	64.3	Conn. Agr. Expt. Sta., Sample 3791.
Manufacturer unknown. Mineral Oil 12-71-5	47.2	93.0	Conn. Agr. Expt. Sta., Sample 5675.
Manufacturer unknown. Mineral Oil 12-71-6	48.0	92.6	Conn. Agr. Expt. Sta., Sample 5676.
Standard Oil Co. of New Jersey. 885 Oil	125.8	65.1	Conn. Agr. Expt. Sta., Sample 6736.
Standard Oil Co. of New Jersey. 56 White Oil	58.2	97.0	Conn. Agr. Expt. Sta., Sample 2185.
Standard Oil Co. of New Jersey. 5 White Oil	96.9	97.0	Conn. Agr. Expt. Sta., Sample 6734.
Standard Oil Co. of New Jersey. Mineral Seal Oil	52.2	84.0	Conn. Agr. Expt. Sta., Sample 2187.
Standard Oil Co. of New Jersey. Spray Oil 14-21	108.4	71.8	Conn. Agr. Expt. Sta., Sample 6312.
Standard Oil Co. of New Jersey. 300 Mineral Seal Oil	45.2	86.0	Conn. Agr. Expt. Sta., Sample 6735.
Standard Oil Co. of New Jersey. White Oil	60.3[1]	94.0	Conn. Agr. Expt. Sta., Sample 953.
Standard Oil Development Co. Acto	159.6	98.0	Conn. Agr. Expt. Sta., Sample 2186.
Standard Oil Development Co. Acto	196.0	94.6	Conn. Agr. Expt. Sta., Sample 4662.
Standard Oil Development Co. Marcol	89.5	96.4	Conn. Agr. Expt. Sta., Sample 2188.

[1] Guaranteed 56.

TABLE 9. PARADICHLORBENZENE

Manufacturer or distributor and brand	Paradichlorbenzene		Publication
	Guaranteed	Found	
	%	%	
Chemical Specialties Co., Los Angeles, Calif. Fumex Moth Killer	99.00	98.26	Calif. Dept. Agr., Spec. Pub. 101:83. 1930.
Clean Home Product Co., Chicago, Ill. Apex Moth Crystals	.....	present	Maine Agr. Expt. Sta., Official Inspections 138:106. 1930.
F. A. Gardner, Covina, Calif. F-A-G Moth Insurance	.....	99.38	Calif. Dept. Agr., Spec. Pub. 101: 83. 1930.
Lewy Chemical Co., Los Angeles, Calif. Moth-Gas Clothes Savers	.....	97.40	Calif. Dept. Agr., Spec. Pub. 101: 83. 1930.
C. E. McClellan & Co., Los Angeles, Calif. McClellan's Moth Nip Block	.....	99.65	Calif. Dept. Agr., Spec. Pub. 101: 83. 1930.
Monsanto Chemical Works. Santo-chlor	.....	99.80	Calif. Dept. Agr., Spec. Pub. 101: 83. 1930.
Chas. C. Navlet Co., Oakland, Calif. Navco Paradichlor	.....	99.51	Calif. Dept. Agr., Spec. Pub. 101: 83. 1930.
San José Spray Manufacturing Co. Para-Di-Chloro-Benzene	100.00	99.80	Calif. Dept. Agr., Spec. Pub. 101: 83. 1930.
Superl Manufacturing Co., Los Angeles, Calif. Superl Moth Block	.....	93.76	Calif. Dept. Agr., Spec. Pub. 101: 83. 1930.

TABLE 10. PARIS GREEN

Manufacturer or distributor and brand	Arsenious oxide				Cupric oxide	Publication
	Total		Water-soluble			
	Guaranteed	Found	Guaranteed	Found	Found	
	%	%	%	%	%	
Ansbacher Insecticide Co., New York, N. Y. Ansbacher's	50.0	55.90	3.50	1.09	....	Maine Agr. Expt. Sta., Official Inspections 138:104. 1930.
Manufacturer unknown..	....	56.59	....	1.76	31.66	Conn. Agr. Expt. Sta., Sample 4713.

P. C. A. Nicotine Capsules

(Poultrymen's Co-operative Milling Association)

	Guaranteed	Found
Nicotine	13.00	13.04

Calif. Dept. Agr., Spec. Pub. 101: 36. 1930.

Peerless Light 60 Spray Emulsion

See Oil Emulsions, Mineral.

Perfection Insect Spray

(Bert L. Gossage, Sebastopol, Calif.)

No analysis.—*Calif. Dept. Agr., Spec. Pub.* 101: 84. 1930.

Pesky Devils Quietus

(Owl Chemical Co., Terre Haute, Ind.)

Found: The product consists of a liquid with a kerosene base and powdered naphthalene.—*Maine Agr. Expt. Sta., Official Inspections* 134: 116. 1929.

Pest Oil 60

Pest Oil 80

See Oil Emulsions, Mineral.

Peterman's Discovery Liquid

(William Peterman, Inc., New York, N. Y.)

Found: The preparation is a petroleum product.—*Maine Agr. Expt. Sta., Official Inspections* 134: 116. 1929.

Peterman's Roach Food

See Sodium Fluoride.

Petrotine Emulsion C—2

Petrotine Emulsion 60

Petrotine Emulsion 70

Petrotine Emulsion 95

See Oil Emulsions, Mineral.

Phar O Termite Spray—Sodium Arsenite

(Pharo Supply Co., Pasadena, Calif.)

	Guaranteed	Found
Arsenic trioxide	28.00	37.50

Calif. Dept. Agr., Spec. Pub. 101: 18. 1930.

Phenol

See Kreo-Phene Crude Carbolic Acid.

Phenol Soap Solutions

See Table 11.

Phosphorus Preparations

See Barnard & Co.'s Reliable Water Bug and Roach Paste; Rat-Nip.

Pine Oil Preparations

See Germo Pine-Ol; Germo Pynol Emulsion; Kliko Disinfectant; O. K. Soluble Pine Oil; Pinofect; Pin-O-Sol; Superl Soluble Pine Oil; Westopine.

Pinofect

(West Disinfecting Co.)

Guaranteed: Inert matter (water) 65 per cent; "bacteriologically equal to pure carbolic acid when tested against a vigorous culture of B. Typhosus by the R-W method."

Found: Water 59.0 per cent; ash 3.10 per cent; soap (as potassium oleate) 15.69 per cent; oil (by difference) 25.31 per cent; phenols none or trace. Oil was fluid; refractive index, 20° C., 1.481. Probably steam-distilled pine oil.—*Conn. Agr. Expt. Sta., Sample* 2032.

Pin-O-Sol

(Southern California Disinfecting Co., Los Angeles, Calif.)

Guaranteed: Water 9.60 per cent.

Found: Total oils 85.69 per cent; mineral oils 37.29 per cent; soap 10.19 per cent; water 4.00 per cent. Sample is a pine oil preparation.—*Calif. Dept. Agr., Spec. Pub.* 101: 77. 1930.

Poisoned Barley

See Strychnine Preparations.

Pomodust

See No. 4 Niagara Pomodust.

Potassium Oleate Solution

See Soaps.

Potassium Sulphide U. S. P.

(K. Inukai Co.)

Found: Sulfide sulfur 24.82 per cent; thiosolfate sulfur 9.22 per cent.—*Calif. Dept. Agr., Spec. Pub.* 101: 30. 1930.

Pratt's Disinfectant

See Phenol Soap Solutions.

Pratt's Poultry Worm Powder

(Pratt Food Co.)

Found: Nicotine 0.92 per cent.—*Calif. Dept. Agr., Spec. Pub.* 101: 36. 1930.

Pratt's Red Mite Special

(Pratt Food Co., Los Angeles, Calif.)

Guaranteed: Water 1.00 per cent.

Found: Phenols 6.33 per cent; tar oils 80.80 per cent: mineral oils 12.00 per cent.—*Calif. Dept. Agr., Spec. Pub.* 101: 71. 1930.

Preemol

Premek Oil Emulsion Medium

Premier A-1 Spray Emulsion

Premier Medium

See Oil Emulsions, Mineral.

Purex

(Purex Chemical Corporation, Los Angeles, Calif.)

	Guaranteed	Found
Available chlorine	4.50	5.03

Calif. Dept. Agr., Spec. Pub. 101: 81. 1930.

Pyrethrum

See Table 12.

R

"Rat-Bis-kit"

(The Rat Biscuit Co., Los Angeles, Calif.)

	Guaranteed	Found
Arsenic	5.00	8.53

Calif. Dept. Agr., Spec. Pub. 101: 22. 1930.

Rat-Nip

(Liquid Veneer Corp., Buffalo, N. Y.)

	Guaranteed	Found
Free phosphorus	1.18	1.22

Maine Agr. Expt. Sta., Official Inspections 134: 116. 1929.

Red Arrow Insect Spray

(McCormick & Co., Baltimore, Md.)

Guaranteed: Water 37 per cent; resin 30 per cent.

Found: Water 37.5 per cent; total ash 6.46 per cent; non-soap ash 3.63 per cent; soap 13.19 per cent; chloroform extract 51.74 per cent.—*Conn. Agr. Expt. Sta., Sample* 5990.

Red Cedar Compound for Moths

(Cook, Everett & Pennell, Portland, Maine)

Guaranteed: Composed of red cedar shavings, lavendar and napthaline.

Found: Red cedar shavings, lavendar flowers and naphthalene present.—*Maine Agr. Expt. Sta., Official Inspections* 134: 116. 1929.

Rex Lye

(Cudahy Packing Co.)

	Guaranteed	Found
Sodium hydroxide	94.00	84.40
Sodium carbonate	2.00	3.18

Calif. Dept. Agr., Spec. Pub. 101: 83. 1930.

Rex Oil A

Rex Oil B

See Oil Emulsions, Mineral.

TABLE 11. PHENOL SOAP SOLUTIONS

Manufacturer or distributor and brand	Phenols	Soap	Non-mineral oils	Water		Publication
	Found	Found	Found	Guaranteed	Found	
	%	%	%	%	%	
Braun-Knecht-Heimann Co. Sheep Dip	21.00	20.00	47.22	10.00	8.30	Calif. Dept. Agr., Spec. Pub. 101:72. 1930.
Brewer & Co., Inc., Worcester, Mass. Creosanthol[1]	....	....	....	....	....	Maine Agr. Expg. Sta., Official Inspections 134:114. 1929.
Brunswig Drug Co., Los Angeles, Calif. Creol Dip	13.40	14.57	60.26	10.00	10.16	Calif. Dept. Agr., Spec. Pub. 101:72. 1930.
California Spray Chemical Co. Ortho Carbolic Disinfectant	62.00[2]	14.90	9.07	....	13.20	Calif. Dept. Agr., Spec. Pub. 101:72. 1930.
Chicken Pharmacy, Petaluma, Calif. Veterinary Liquor Cresolis[3]	52.75	19.69	....	....	24.60	Calif. Dept. Agr., Spec. Pub. 101:72. 1930.
Germo Manufacturing Co. Germo Creosote Disinfectant Dip	10.88	12.98	65.42	10.00	9.50	Calif. Dept. Agr., Spec. Pub. 101:72. 1930.
Dr. Hess and Clark. Dr. Hess Disinfectant Dip[4]	15.90	17.68	52.86	9.50	7.60	Calif. Dept. Agr., Spec. Pub. 101:73. 1930.
Hockwald Chemical Co., Palo Alto, Calif. Hockwald Sheep Dip	12.66	13.00	66.30	12.00	6.10	Calif. Dept. Agr., Spec. Pub. 101:73. 1930.
George H. Lee Co., Watsonville, Calif. Lee's Dip	21.33	28.15	40.61	10.00	8.00	Calif. Dept. Agr., Spec. Pub. 101:73. 1930.
Arthur R. Maas Laboratories, Los Angeles, Calif. Maas' Sheep Dip	13.00	15.10	58.65	20.00	11.20	Calif. Dept. Agr., Spec. Pub. 101:73. 1930.
Arthur R. Maas Laboratories, Los Angeles, Calif. Cresy-Lol-Dip	17.10	21.36	48.18	25.00	10.66	Calif. Dept. Agr., Spec. Pub. 101:73. 1930.
C. U. McClellan & Co. McClellan's Cresolis	50.30	26.48	....	16.00	22.60	Calif. Dept. Agr., Spec. Pub. 101:73. 1930.
C. U. McClellan & Co. McClellan's Disinfectant Dip	9.00	15.76	63.41	10.00	10.60	Calif. Dept. Agr., Spec. Pub. 101:73. 1930.

C. U. McClellan & Co. McClellan's Sheep Dip	12.93	18.34	58.13	12.00	8.50	Calif. Dept. Agr., Spec. Pub. 101:73.	1930.
Michel & Pelton Co. Cub Sheep Dip	13.00	7.31	74.29	10.00	4.00	Calif. Dept. Agr., Spec. Pub. 101:73.	1930.
Michel & Pelton Co., San Francisco, Calif. Mapco Liquor Cresolis Compound U.S.P	44.20	35.60	....	....	11.90	Calif. Dept. Agr., Spec. Pub. 101:73.	1930.
Mona Motor Oil Co., Santa Paula, Calif. K O I L Creosote Stock Dip.	13.66[5]	20.83	55.16	8.00	8.20	Calif. Dept. Agr., Spec. Pub. 101:74.	1930.
Mona Motor Oil Co., Santa Paula, Calif. Stock Dip	20.66	18.10	49.44	....	8.40	Calif. Dept. Agr., Spec. Pub. 101:74.	1930.
Pratt Food Co. Pratt's Disinfectant	25.94	20.50	44.65	10.00	6.67	Calif. Dept. Agr., Spec. Pub. 101:74.	1930.
Purity Chemical Products Co. Composal	51.16	21.43	7.69	20.00	19.40	Calif. Dept. Agr., Spec. Pub. 101:74.	1930.
R. R. Rogers Chemical Co., Santa Cruz, Calif. Sheep Dip[6]	22.66	11.40	32.42	15.00	4.50	Calif. Dept. Agr., Spec. Pub. 101:74.	1930.
R. R. Rogers Chemical Co., Santa Cruz, Calif. U. S. P. Liquor Cresolis Compound[7]	50.10	29.50	....	18.00	14.90	Calif. Dept. Agr.,Spec.Pub. 101:74-75.	1930.
Scott & Gilbert Co., Arcata, Calif. S & G Sheep Dip	13.87	14.16	61.23	10.00	8.75	Calif. Dept. Agr., Spec. Pub. 101:75.	1930.
Sherwin-Williams Co. Sherwin-Williams Pheno-Dip	13.67	24.10	52.13	8.00	8.00	Calif. Dept. Agr., Spec. Pub. 101:75.	1930.
Small's Seed Co., Riverside, Calif. Small's Dip and Disinfectant	25.33	27.40	36.19	8.00	7.80	Calif. Dept. Agr., Spec. Pub. 101:75.	1930.
Southern California Disinfecting Co., Los Angeles, Calif. Nuc-Oleum	9.33	17.53	62.35	10.00	10.20	Calif. Dept. Agr., Spec. Pub. 101:75.	1930.
Western Wholesale Drug Co., Los Angeles, Calif. Imperial Sheep Dip	11.00	12.03	66.89	10.00	8.60	Calif. Dept. Agr., Spec. Pub. 101:75.	1930.
Worrell Manufacturing Co., Fontana, Calif. Worrell's Crespolin	44.50	35.51	0.62	18.00	14.20	Calif. Dept. Agr., Spec. Pub. 101:75.	1930.

[1] Found to be a creolin preparation.
[2] Guaranteed 60.00%.
[3] Guaranteed phenols 33.00%; soap 19.00%.
[4] Guaranteed phenols 14.00%; soap 20.00%; non-mineral oils 53.00%.
[5] Guaranteed 20.00%.
[6] Mineral Oil 24.60%.
[7] Cresols guaranteed 50.00%; found 37.10%.

TABLE 12. PYRETHRUM

Manufacturer or distributor and brand	Oil	Moisture	Organic matter	Ash	Publication
	%	%	%	%	
Buhach Producing and Manufacturing Co., Fresno, Calif. Buhach Insect Powder....	6.27[1]	5.60	87.56	6.86	Calif. Dept. Agr., Spec. Pub. 101: 76. 1930.
Furst McNess Co., Oakland, Calif. F. W. McNess Insect Powder.....	5.02	6.42	87.66	5.92	Calif. Dept. Agr., Spec. Pub. 101: 76. 1930.
The Holmerden Co., Stratford, Conn. O-Bit Insect Powder[2].....	....	....	....	....	Maine Agr. Expt. Sta., Official Inspections 134:115. 1929.
E. A. Murray Co., Detroit, Mich. Bug-Ant Doom[3].....	....	....	....	....	Maine Agr. Expt. Sta., Official Inspections 134:114. 1929.
Purity Chemical Co., Santa Rosa, Calif. Hi-Test Pyrethrum Insect Powder.....	5.86	7.20	86.20	6.60	Calif. Dept. Agr., Spec. Pub. 101: 76. 1930.

[1] Guaranteed 6.00%.
[2] Guaranteed active ingredients 100%; found to be pyrethrum.
[3] Found to be pyrethrum.

Rex-Sul-Powder

See Sulfur.

Rex Toxol

See Oil Emulsions, Mineral.

Roach-Ex

(Chemical Specialties Co., Los Angeles, Calif.)

	Guaranteed	Found
Sodium fluoride	77.34	79.55
Pyrethrum	7.86	....
Organic matter	....	10.30

Calif. Dept. Agr., Spec. Pub. 101: 78. 1930.

Roach Powder

(Southern California Disinfecting Co., Los Angeles, Calif.)

	Guaranteed	Found
Sodium fluoride	80.00	82.21
Pyrethrum	10.00	....
Organic matter	....	8.10

Calif. Dept. Agr., Spec. Pub. 101: 79. 1930.

Roachsault

See Sodium Fluoride.

Rough-on-Rats Poison

(E. S. Wells, Chemist, Jersey City, N. J.)

Found: Arsenic trioxide 96.0 per cent.—*Maine Agr. Expt. Sta., Official Inspections* 138: 107. 1930.

S

Sani Chlor

(Crown Products Co., San Francisco, Calif.)

	Guaranteed	Found
Available chlorine	4.50	4.85

Calif. Dept. Agr., Spec. Pub. 101: 80. 1930.

Santo-chlor

See Paradichlorbenzene.

Scalecide with Fungicide

See Oil Emulsions, Mineral.

Seal Oil

See Oils, Mineral.

S & G Sheep Dip
Sheep Dip

See Phenol Soap Solutions.

Sherwin-Williams Copper Lime Dust

See Bordeaux Mixture.

Sherwin-Williams Light Oil No. 50
Sherwin-Williams Medium Oil No. 65
Sherwin-Williams Oil No. 60

See Oil Emulsions, Mineral.

Sherwin-Williams Pheno-Dip

See Phenol Soap Solutions.

Sinclair Chieftain Brand Chlorinated Lime

(Sinclair Manufacturing Co., Los Angeles, Calif.)

	Guaranteed	Found
Available chlorine	24.00	32.25

Calif. Dept. Agr., Spec. Pub. 101: 81. 1930.

S. L. J. C. Insecticide

(S. L. Jones Co., San Francisco, Calif.)

	Guaranteed	Found
Water	77.00	79.20

Calif. Dept. Agr., Spec. Pub. 101: 76. 1930.

Small's Ant Syrup

(Small's Seed Co., Riverside, Calif.)

	Guaranteed	Found
Arsenic	0.10	0.17

Calif. Dept. Agr., Spec. Pub. 101: 20. 1930.

Small's Aphis Spray

(Small's Seed Co., Riverside, Calif.)

	Guaranteed	Found
Nicotine	2.50	2.61
Soap	11.75	8.97
Water	84.75	85.33

Calif. Dept. Agr., Spec. Pub. 101: 38. 1930.

Small's Cold Spray

(Small's Seed Co., Riverside, Calif.)

	Guaranteed	Found
Water	12.00	0.40

Calif. Dept. Agr., Spec. Pub. 101: 84. 1930.

Small's Dip and Disinfectant

See Phenol Soap Solutions.

Small's Louse Powder

(Small's Seed Co., Riverside, Calif.)

	Guaranteed	Found
Nicotine	0.40	0.55
Sulfur	40.00	43.95
Sodium fluoride	20.00	18.22

Calif. Dept. Agr., Spec. Pub. 101: 35. 1930.

Snail-A-Tor

(Snail-A-Tor Laboratory, Pasadena, Calif.)

Found: Calcium carbonate 56.10 per cent; calcium sulfate 0.96 per cent; calcium oxide 27.70 per cent; borax ($Na_2B_4O_7$) 9.80 per cent.—*Calif. Dept. Agr., Spec. Pub.* 101: 86. 1930.

Soap

See Table 13, and Super-Suds.

Soapstone

See Talc.

Sodium Arsenate

See Holmerden Weed Destroyer.

TABLE 13. SOAP

Manufacturer or distributor and brand	Soap		Water		Publication
	Guaranteed	Found	Guaranteed	Found	
	%	%	%	%	
Acme White Lead & Color Works. Acme Fish Oil Spray Soap	75.00	84.80	25.00	10.00	Calif. Dept. Agr., Spec. Pub. 101: 68. 1930.
Acme White Lead & Color Works. Acme Spray Soap	70.00	70.31	30.00	10.00	Calif. Dept. Agr., Spec. Pub. 101: 68. 1930.
Clipper Chemical Co., Los Angeles, Calif. Clipper Brand Original Fish Oil Soap Flakes	84.00	72.80	....	5.80	Calif. Dept. Agr., Spec. Pub. 101: 68. 1930.
Export Soap Co. E. S. C. Condensed Rosin Potash Spray Paste Form	....	71.90	35.00	26.00	Calif. Dept. Agr., Spec. Pub. 101: 68. 1930.
Export Soap Co. E. S. C. Fish Oil Soap	....	61.70	25.00	28.40	Calif. Dept. Agr., Spec. Pub. 101: 68. 1930.
Export Soap Co., Los Angeles, Calif. E. S. C. Whale Oil Soap	....	25.20	70.00	72.30	Calif. Dept. Agr., Spec. Pub. 101: 68. 1930.
Interstate Chemical Co., Jersey City, N. J. Key Brand Fish Oil Soap	50.00	53.79	....	....	Maine Agr. Exp. Sta., Official Inspections 134:115. 1929.
Manufacturer unknown. Potassium Oleate Solution[2]	40.00[1]	34.40	60.00	58.2	Conn. Agr. Expt. Sta., Sample 7875.
Michel & Pelton Co., San Francisco, Calif. Mapco Liquid Whale Oil Soap	....	24.30	75.00	74.00	Calif. Dept. Agr., Spec. Pub. 101: 68. 1930.
Chas. C. Navlet Co., Oakland, Calif. Liquid Whale Oil Soap	25.00	27.50	....	72.00	Calif. Dept. Agr., Spec. Pub. 101: 68. 1930.

[1] Potassium oleate.
[2] Found: Free potassium hydroxide 1.39%; potassium carbonate 2.97%; non-soap ash 0.61%.

Sodium Arsenite Solution

(Scientific Pest Control Laboratories, Altadena, Calif.)

	Guaranteed	Found
Arsenic trioxide	30.00	30.07
Sodium hydroxide	10.00	13.20

Calif. Dept. Agr., Spec. Pub. 101: 18. 1930.

Sodium Arsenite Solution

See also B E Standard Sodium Arsenite Solution; McEverlast Sodium Arsenite; Mission Sodium Arsenite Solution; Phar-O-Termite Spray.

Sodium Fluoride

See Table 14.

Sodium Fluosilicate

See "Flu-Si" Dust.

Sodium Hydroxide

See B. T. Babbitt's Concentrated Lye; Fort Industry Brand Lye; Holly Brand Lye; King Pin Brand Lye; Rex Lye.

Sodium Hypochlorite Solution

(Manufacturer unknown)

Found: Available chlorine 2.19 per cent; sodium hypochlorite 2.30 per cent.—*Conn. Agr. Expt. Sta., Sample* 770.

Solite Spray

See Oil Emulsions, Mineral.

Spray Oil 14—21

See Oils, Mineral.

Squirrel Annihilator

See Strychnine Preparations.

Stanlar Sodium Fluoride

Stanlar Sodium Fluoride Lice Control

See Sodium Fluoride.

Sterling Ant Driver

(Western Wholesale Drug Co., Santa Paula, Calif.)

	Guaranteed	Found
Arsenic	3.38	5.27

Calif. Dept. Agr., Spec. Pub. 101: 20. 1930.

Sterling Argentine Ant Poison

(Western Wholesale Drug Co., Los Angeles, Calif.)

	Guaranteed	Found
Arsenic	0.11	0.13

Calif. Dept. Agr., Spec. Pub. 101: 20. 1930.

Stock Dip

See Phenol Soap Solutions.

Strychnine Preparations

See Table 15.

TABLE 14. SODIUM FLUORIDE

Manufacturer or distributor and brand	Sodium fluoride		Organic Matter	Publication
	Guaranteed	Found	Found	
	%	%	%	
Barrett Chemical Co., Brooklyn, N. Y. Barrett's Roachsault	50	54.3	.....	Maine Agr. Expt. Sta., Official Inspections 138:106. 1930.
Coffin-Redington Co., Monterey, Calif.	95.00	97.55	.....	Calif. Dept. Agr., Spec. Pub. 101: 78. 1930.
C. U. McClellan & Co. McClellan's Delousing Grease	50.00	53.44	.....	Calif. Dept. Agr., Spec. Pub. 101: 78. 1930.
William Peterman, Inc., New York, N. Y. Peterman's Roach Food	40-50	56.16	.....	Maine Agr. Expt. Sta., Official Inspections 134:116. 1929.
Southern California Disinfecting Co., Los Angeles, Calif. Ant Powder	.....	80.41	8.82	Calif. Dept. Agr., Spec. Pub. 101: 79. 1930.
Stanton Milling & Sales Co. Stanlas	95.00	98.53	.....	Calif. Dept. Agr., Spec. Pub. 101: 79. 1930.
Stanton Milling & Sales Co. Stanlas Sodium Fluoride Lice Control	.....	92.72	.....	Calif. Dept. Agr., Spec. Pub. 101: 79. 1930.

TABLE 15. STRYCHNINE PREPARATIONS

Manufacturer or distributor and brand	Strychnine		Publication
	Guaranteed	Found	
	%	%	
Brunswig Drug Co., Los Angeles, Calif. Gopher Bane	.....	0.64	Calif. Dept. Agr., Spec. Pub. 101: 42. 1930.
Brunswig Drug Co., Los Angeles, Calif. Squirrel Annihilator	.....	0.28	Calif. Dept. Agr., Spec. Pub. 101: 42. 1930.
John F. Leinen Chemical Co. Strychnine Alkaloid Roche	.....	99.06	Calif. Dept. Agr., Spec. Pub. 101: 42. 1930.
W. G. Reardon Laboratories, Fresno, Calif. Mouse Seed	.....	0.36	Calif. Dept. Agr., Spec. Pub. 101: 42. 1930.
Stover, Gibbs & Winsel. El Rey Gopher Poison	0.31	0.32	Calif. Dept. Agr., Spec. Pub. 101: 42. 1930.
Western Wholesale Drug Co. Poisoned Barley	0.27	0.26	Calif. Dept. Agr., Spec. Pub. 101: 42. 1930.

Sulfocide

(B. G. Pratt Co., New York, N. Y.)

	Guaranteed	Found
Sodium polysulfide	38-40	32.20
Sodium thiosulfate	1-2	3.76
Sodium sulfate	....	0.13
Inert	58-60	....

Conn. Agr. Expt. Sta., Sample 5989.

Sulfur

See Table 16.

Summer Oil

See Oil Emulsions, Mineral.

Summers' Copper Dust

(Summers Fertilizer Co., Baltimore, Md.)

	Guaranteed	Found
Total arsenic	6.85	6.72
Total copper	6.85	7.16

Maine Agr. Expt. Sta., Official Inspections 138:104. 1930.

Sunoco Self-Emulsifying Spray

See Oil Emulsions, Mineral.

Sun Ray

(J. B. Keightly, Los Angeles, Calif.)

	Guaranteed	Found
Available chlorine	4.50	5.14

Calif. Dept. Agr., Spec. Pub. 101: 80. 1930.

Superl Ant Powder

(Superl Manufacturing Co., Los Angeles, Calif.)

Guaranteed: Talc 10.00 per cent.

Found: Sodium fluoride 65.62 per cent; organic matter 21.90 per cent.—*Calif. Dept. Agr., Spec. Pub.* 101: 79. 1930.

Superl Insect Spray

(Superl Manufacturing Co., Los Angeles, Calif.)

No analysis.—*Calif. Dept. Agr., Spec. Pub.* 101: 84. 1930.

Superl Moth Block

See Paradichlorbenzene.

Superl Soluble Pine Oil

(Superl Manufacturing Co., Los Angeles, Calif.)

Guaranteed: Water 10.00 per cent.

Found: Total oils 85.31 per cent; mineral oils 51.20 per cent; soap 11.77 per cent; water 2.66 per cent.—*Calif. Dept. Agr., Spec. Pub.* 101: 77. 1930.

Super-Suds

(Colgate-Palmolive-Peet Co.)

Found: Soap 62.89 per cent; free fatty acid 0.26 per cent; sodium carbonate 5.59 per cent; sodium silicate 21.67 per cent; insoluble ash 0.56 per cent; water 9.25 per cent; phosphate trace; no free sodium hydroxide or borax.—*Conn. Agr. Expt. Sta., Sample* 5549.

T

Talbot's Ant Powder

(Talbot Manufacturing Co., Fresno, Calif.)

	Guaranteed	Found
Sodium fluoride (Na_2F_2)	74.00	76.90
Sodium acid fluoride ($NaHF_2$)	3.00	3.98
Pyrethrum	9.00	....
Organic matter	....	12.50

Calif. Dept. Agr., Spec. Pub. 101: 79. 1930.

Talc, Powdered Soapstone

(Apothecaries Hall Co., Waterbury, Conn.)

Found: 80.65 per cent passed 200 mesh.—*Conn. Agr. Expt. Sta., Sample* 754.

Talc, Purified, U. S. P.

(Apothecaries Hall Co., Waterbury, Conn.)

Found: All passed 200 mesh; 81.58 per cent passed 300 mesh.—*Conn. Agr. Expt. Sta., Sample* 753.

Talc, Smithko Regular Bestone

(Smith Chemical & Color Co., New York)

Found: 42.86 per cent passed 200 mesh.—*Conn. Agr. Sta., Sample* 756.

Talcum, Powdered

(C. W. Whittlesey, New Haven, Conn.)

Found: All passed 200 mesh.—*Conn. Agr. Expt. Sta., Sample* 755.

Tarine

(Brunswig Drug Co., Los Angeles, Calif.)

No analysis.—*Calif. Dept. Agr., Spec. Pub.* 101: 84. 1930.

TABLE 16. SULFUR

Manufacturer or distributor and brand	Sulfur		Water	Ash	Acidity as Sulfuric Acid	Type	Fineness			Publication
	Guaranteed	Found	Found	Found	Found		100 mesh	200 mesh	300 mesh	
	%	%	%	%	%		%	%	%	
Braun-Knecht-Heimann Co., San Francisco, Calif. Powder	100.00	99.85	0.10	....	0.05	Sublimed	....	....	....	Calif. Dept. Agr., Spec. Pub. 101: 23. 1930.
Cabco Supply Stores, Fresno, Calif. Golden Glow Sublimed	100.00	99.85	0.10	....	0.05	Sublimed	....	....	....	Calif. Dept. Agr., Spec. Pub. 101: 23. 1930.
Cabco Supply Stores, Fresno, Calif. Lincoln	98.00	98.15	0.20	0.90	0.05	Ground	....	....	....	Calif. Dept. Agr., Spec. Pub. 101: 23. 1930.
California Rex Spray Co., Watsonville, Calif. Rex-Sul-Powder	94.00	94.30	0.40	1.30	....	.....	....	....	....	Calif. Dept. Agr., Spec. Pub. 101: 23. 1930.
California Spray Chemical Co., Porterville, Calif. Del Monte Citrus	90.00	92.30	0.10	6.90	....	Ground	....	....	....	Calif. Dept. Agr., Spec. Pub. 101: 23. 1930.
E. M. Ives, Meriden, Conn.	.....	92.47	0.28	6.35	....	.....	....	....	99.6	Conn. Agr. Expt. Sta., Sample 6022.
E. M. Ives, Meriden, Conn.	.....	....	....	....	....	.....	....	....	100.0	Conn. Agr. Expt. Sta., Sample 9857A.
E. M. Ives, Meriden, Conn.	.....	....	....	....	....	.....	....	....	100.0	Conn. Agr. Expt. Sta., Sample 867.
Manufacturer unknown	.....	91.10	....	....	....	.....	99.7	91.4	53.6	Conn. Agr. Expt. Sta., Sample 9429.
Manufacturer unknown	.....	91.86	....	....	....	.....	99.5	91.8	61.9	Conn. Agr. Expt. Sta., Sample 9430.

Niagara Sprayer & Chemical Co., Sebastopol, Calif. Niagara Aeroplane Dusting	98.00	99.00	0.20	0.80	....	Ground	....	....	....	Calif. Dept. Agr., Spec. Pub. 101: 24. 1930.
H. K. Patch, Los Angeles, Calif. Premek (Reversible Colloidal)	50.00	52.56	40.00	....	....	.....	....	....	....	Calif. Dept. Agr., Spec. Pub. 101: 24. 1930.
San Francisco Sulphur Co. Anchor Brand	100.00	99.75	0.11	0.15	0.13	Sublimed	....	....	....	Calif. Dept. Agr., Spec. Pub. 101: 24. 1930.
San Francisco Sulphur Co. Electric Super Adhesive	99.80	99.80	0.15	0.10	0.05	Ground	....	....	....	Calif. Dept. Agr., Spec. Pub. 101:24-25. 1930
Western Sulphur Industries, Sebastopol, Calif. Carnation Brand Dusting	98.00	97.85	0.10	1.90	0.05	Ground	....	....	....	Calif. Dept. Agr., Spec. Pub. 101: 25. 1930.
Western Sulphur Industries, Sebastopol, Calif. Super Poppy Colloidal and Poppy Ventilated Dusting	97.00	96.85	0.40	1.60	0.05	.....	....	....	....	Calif. Dept. Agr., Spec. Pub. 101: 25. 1930.
Western Sulphur Industries, Porterville, Calif. Super Poppy Dusting	.....	98.03	0.20	1.20	0.07	.....	....	....	....	Calif. Dept. Agr., Spec. Pub. 101: 25. 1930.
Western Sulphur Industries, Sebastopol, Calif. W. W. Brand Western Wettable Black Gas	87.00	88.25	0.30	8.50	....	.....	....	....	....	Calif. Dept. Agr., Spec. Pub. 101: 25. 1930.

Thallium Sulphate

(Braun-Knecht-Heimann Co., Bakersfield, Calif.)

	Guaranteed	Found
Thallium sulfate	99.00	99.71

Calif. Dept. Agr., Spec. Pub. 101: 43. 1930.

300 Mineral Seal Oil

See Oils, Mineral.

T. N. T. Nicotine Capsules

(White Manufacturing Co., Gardena, Calif.)

	Guaranteed	Found
Nicotine	13.00	12.90

Calif. Dept. Agr., Spec. Pub. 101: 36. 1930.

Tobacco Dust

See Nicotine Dusts.

Tobacco Stem Extract

(Joseph Bubenicek, Woodmont, Conn.)

Found: Nicotine 0.0330 grams per 100 cc.—*Conn. Agr. Expt. Sta., Sample* 7083.

To-na-cide

(To-na-cide Co., Basking Ridge, N. J.)

Found: Total ash 8.95 per cent; phosphorus pentoxide 0.12 per cent; potassium oxide 0.48 per cent; total nitrogen 0.49 per cent; nicotine 0.21 per cent; naphthalene 77.57 per cent. The preparation is a mixture of naphthalene and tobacco with some sand.—*Conn. Agr. Expt. Sta., Sample* 8628.

Trafton's Old Reliable Spray Emulsion Medium
Triple X
Triple X Heavy
Triple X Light 50
Triple X Medium
Triple X 60
Triple X 70

See Oil Emulsions, Mineral.

Tri-Tex

(Tri-Tex, Incorporated, Los Angeles, Calif.)

	Guaranteed	Found
Available chlorine	4.50	5.01

Calif. Dept. Agr., Spec. Pub. 101: 81. 1930.

25—75 Sherwin-Williams Copper Lime Dust

See Bordeaux Mixture.

U

Uenotron

(Takio Aoki, San Francisco, Calif.)

	Guaranteed	Found
Water	75.00	74.93

Calif. Dept. Agr., Spec. Pub. 101: 76. 1930.

Universal Brand Neutrol
Universal Brand Neutrol A
Universal Brand Nicona
Universal Brand Viscona E Medium
Universal Brand Viscona Heavy
Universal Brand Viscona W Medium
Universal Orchard Spray Dormant Soluble Oil
Universal Orchard Spray Triumph

See Oil Emulsions, Mineral.

U. S. P. Liquor Cresolis Compound

See Phenol Soap Solutions.

V

Vermex

(Vermex Co. of America)

	Guaranteed	Found
Water	85.00	83.70

Calif. Dept. Agr., Spec. Pub. 101: 84. 1930.

Verm-O-Spray "A" Agricultural

(Verm-O-Spray Products Co., Inc., West Haven, Conn.)

Found: Nicotine 0.001 per cent.—*Conn. Agr. Expt. Sta., Sample* 5727.

Veterinary Liquor Cresolis

See Phenol Soap Solutions.

Victor Soluble Oil
Victor Soluble Oil (Jarvis Formula)—1930 Stock
Volck
Volck's Miscible No. 2

See Oil Emulsions, Mineral.

W

Westopine

(West Disinfecting Co.)

Found: Water 77.5 per cent; ash 2.80 per cent; soap (as potassium oleate) 13.02 per cent; oil (by difference) 9.48 per cent; phenols none or trace. Refractive index of oil, 20° C., 1.487.—*Conn. Agr. Expt. Sta., Sample* 2033.

White Oil

See Oils, Mineral.

Wilson's O. K. Plant Spray

(Andrew Wilson, Inc., Pasadena, Calif.)

	Guaranteed	Found	Guaranteed	Found
Nicotine	1.40	1.68	1.60	1.77
Soap	7.00	6.68	10.00	8.18
Water	....	89.60	....	87.50
Essential oils	2.00	1.97	2.30	2.60

Calif. Dept. Agr., Spec. Pub. 101: 38. 1930.

Wintrol

See Oil Emulsions, Mineral.

Worrell's Crespolin

See Phenol Soap Solutions.

X

Xfungus

(Charles Cooper & Co., New York, N. Y.)

Found: Copper 21.24 per cent; free sulfur 57.58 per cent; sulfate sulfur 0.38 per cent.

CALCULATED COMPOSITION:

Copper carbonate 2 $CuCO_3.Cu(OH)_2$	37.04
Copper sulfate ($CuSO_4 . 5H_2O$)	2.96
Sulfur	57.58

Conn. Agr. Expt. Sta., Sample 2227.